

=> fil reg

FILE 'REGISTRY' ENTERED AT 13:12:29 ON 08 FEB 1999
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STRUCTURE FILE UPDATES: 6 FEB 99 HIGHEST RN 219473-81-1
DICTIONARY FILE UPDATES: 7 FEB 99 HIGHEST RN 219473-81-1

TSCA INFORMATION NOW CURRENT THROUGH JUNE 29, 1998

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

=> d ide can tot 175

L75 ANSWER 1 OF 5 REGISTRY COPYRIGHT 1999 ACS

RN 12619-70-4 REGISTRY

CN Cyclodextrin (9CI) (CA INDEX NAME)

OTHER NAMES:

CN Celdex

CN Celdex CH 20

CN Celdex CH 30

CN Cycloamylose

CN Rhodocap L 20

CN Ringdex P

DR 100091-36-9

MF Unspecified

CI COM, MAN

LC STN Files: AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, CA, CAPLUS,
CASREACT,

CEN, CHEMCATS, CHEMLIST, CBNB, CIN, CSCHEM, DDFU, DRUGU, EMBASE,
IFICDB,

IFIPAT, IFIUDB, IPA, NAPRALERT, PIRA, PROMT, TOXLINE, TOXLIT,
USPATFULL

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

2478 REFERENCES IN FILE CA (1967 TO DATE)

808 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

2481 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 130:89853

REFERENCE 2: 130:86181

REFERENCE 3: 130:86005

REFERENCE 4: 130:85982

REFERENCE 5: 130:85914

REFERENCE 6: 130:85645

REFERENCE 7: 130:80699

REFERENCE 8: 130:77956

REFERENCE 9: 130:75518

REFERENCE 10: 130:71594

L75 ANSWER 2 OF 5 REGISTRY COPYRIGHT 1999 ACS
 RN 9057-02-7 REGISTRY
 CN Pullulan (9CI) (CA INDEX NAME)
 OTHER NAMES:
 CN P 10
 CN P 10 (carbohydrate)
 CN P 100
 CN P 100 (carbohydrate)
 CN P 20
 CN P 20 (carbohydrate)
 CN P 800
 CN P 800 (carbohydrate)
 CN PF 20
 CN PF 20 (carbohydrate)
 CN PF 30
 CN PF 7
 CN PI 20
 CN Pullulan PF 10
 DR 58252-16-7, 58391-35-8, 152743-43-6
 MF Unspecified
 CI PMS, COM, MAN
 PCT Manual registration, Polyother, Polyother only
 LC STN Files: AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, CA, CANCERLIT,
 CAPLUS, CASREACT, CEN, CHEMCATS, CHEMLIST, CBNB, CIN, CSCHEM,
 EMBASE,
 IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MSDS-OHS, NAPRALERT, PIRA, PROMT,
 RTECS*, TOXLINE, TOXLIT, USPATFULL
 (*File contains numerically searchable property data)
 Other Sources: EINECS**, NDSL**, TSCA**
 (**Enter CHEMLIST File for up-to-date regulatory information)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

1475 REFERENCES IN FILE CA (1967 TO DATE)

196 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

1478 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 130:84057

REFERENCE 2: 130:80404

REFERENCE 3: 130:65316

REFERENCE 4: 130:53042

REFERENCE 5: 130:43370

REFERENCE 6: 130:39151

REFERENCE 7: 130:26299

REFERENCE 8: 130:24361

REFERENCE 9: 130:7272

REFERENCE 10: 130:4084

L75 ANSWER 3 OF 5 REGISTRY COPYRIGHT 1999 ACS
 RN 9054-89-1 REGISTRY
 CN Dismutase, superoxide (9CI) (CA INDEX NAME)
 OTHER NAMES:
 CN Dismuzyne Plus
 CN E.C. 1.15.1.1
 CN Ontosein
 CN Orgotein
 CN Orgoteins
 CN Ormetein
 CN Ormeteins
 CN Palosein
 CN Peroxinorm
 CN Proteins, orgoteins
 CN Superoxide dismutase
 CN Superphycodismutase
 DR 9016-01-7
 MF Unspecified
 CI COM, MAN
 LC STN Files: ADISINSIGHT, AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, CA,
 CABA, CANCERLIT, CAPLUS, CEN, CHEMCATS, CHEMLIST, CBNB, CIN,
 CSCHEM,
 DDFU, DRUGNL, DRUGU, DRUGUPDATES, EMBASE, IFICDB, IFIPAT, IFIUDB,
 IPA,
 MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PIRA, PHAR, PROMT,
 RTECS*, TOXLINE, TOXLIT, USAN, USPATFULL
 (*File contains numerically searchable property data)
 Other Sources: EINECS**, WHO
 (**Enter CHEMLIST File for up-to-date regulatory information)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
 15288 REFERENCES IN FILE CA (1967 TO DATE)
 490 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 15299 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 130:86633
 REFERENCE 2: 130:86099
 REFERENCE 3: 130:80755
 REFERENCE 4: 130:80753
 REFERENCE 5: 130:80485
 REFERENCE 6: 130:80342
 REFERENCE 7: 130:79845
 REFERENCE 8: 130:79780
 REFERENCE 9: 130:79709
 REFERENCE 10: 130:79662

L75 ANSWER 4 OF 5 REGISTRY COPYRIGHT 1999 ACS
 RN 7782-44-7 REGISTRY
 CN Oxygen (8CI, 9CI) (CA INDEX NAME)

OTHER NAMES:

CN Dioxygen
CN Molecular oxygen
CN Oxygen molecule
FS 3D CONCORD
DR 1338-93-8, 14797-70-7, 80217-98-7, 80937-33-3
MF O2
CI COM
LC STN Files: AGRICOLA, AIDSLINE, ANABSTR, APILIT, APILIT2, APIPAT,
APIPAT2, BIOBUSINESS, BIOSIS, CA, CABA, CANCERLIT, CAPLUS, CASREACT,
CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CBNB, CHEMSAFE, CIN,
CSCHEM,
CSNB, DETHERM*, DDFU, DIPPR*, DRUGU, EMBASE, GMELIN*, HSDB*, IFICDB,
IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NIOSHTIC, PDLCOM*, PIRA,
PROMT, RTECS*, SPECINFO, TOXLINE, TOXLIT, TRCTHERMO*, TULSA,
ULIDAT,
USAN, USPATFULL, VTB
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)

O=O

224944 REFERENCES IN FILE CA (1967 TO DATE)
15638 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
225076 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 130:89853
REFERENCE 2: 130:89782
REFERENCE 3: 130:89754
REFERENCE 4: 130:89735
REFERENCE 5: 130:89709
REFERENCE 6: 130:89680
REFERENCE 7: 130:89676
REFERENCE 8: 130:89544
REFERENCE 9: 130:89476
REFERENCE 10: 130:89413

L75 ANSWER 5 OF 5 REGISTRY COPYRIGHT 1999 ACS

RN 99-20-7 REGISTRY

CN .alpha.-D-Glucopyranoside, .alpha.-D-glucopyranosyl (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Trehalose (8CI)

OTHER NAMES:

CN .alpha.,.alpha.'-D-Trehalose

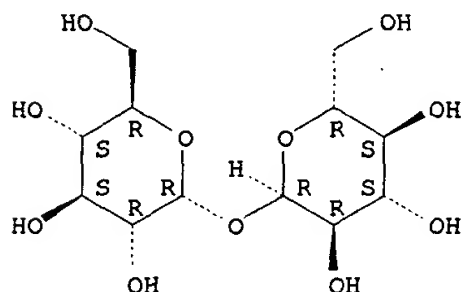
CN .alpha.,.alpha.-Trehalose

CN .alpha.-D-Trehalose

CN .alpha.-Trehalose

CN D-(+)-Trehalose
 CN D-Trehalose
 CN Ergot sugar
 CN Mycose
 CN Natural trehalose
 CN Trehaose
 FS STEREOSEARCH
 MF C12 H22 O11
 CI COM
 LC STN Files: AGRICOLA, AIDSLINE, ANABSTR, BEILSTEIN*, BIOBUSINESS,
 BIOSIS,
 CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CEN, CHEMCATS,
 CHEMLIST,
 CBNB, CIN, CSCHEM, DETHERM*, DDFU, DRUGU, EMBASE, GMELIN*, HODOC*,
 IPA,
 MEDLINE, MRCK*, NAPRALERT, PIRA, PROMT, SPECINFO, TOXLINE, TOXLIT,
 TULSA, USPATFULL
 (*File contains numerically searchable property data)
 Other Sources: DSL**, EINECS**, TSCA**
 (**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry. Rotation (+).



3539 REFERENCES IN FILE CA (1967 TO DATE)
 217 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 3545 REFERENCES IN FILE CAPLUS (1967 TO DATE)
 64 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 130:83085
 REFERENCE 2: 130:82332
 REFERENCE 3: 130:82331
 REFERENCE 4: 130:78933
 REFERENCE 5: 130:78560
 REFERENCE 6: 130:77796
 REFERENCE 7: 130:77697
 REFERENCE 8: 130:77633
 REFERENCE 9: 130:71557

REFERENCE 10: 130:71556

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(FILE 'HCAPLUS' ENTERED AT 12:47:35 ON 08 FEB 1999)

L4 14 S E3,E4
E AGA H/AU
L5 167 S E3,E4,E18
E SHIBUYA T/AU
L6 189 S E3-E6,E42
E FUKUDA S/AU
L7 272 S E3,E85
E MIYAKE T/AU

FILE 'REGISTRY' ENTERED AT 12:52:02 ON 08 FEB 1999

L8 1 S 99-20-7
E C12H22O11/MF
L9 668 S E3
L10 380 S L9 AND GLUCO?
L11 229 S L10 NOT (GALACT? OR MANNO?)
L12 164 S L11 NOT FRUCTO?
L13 137 S L12 NOT (11C# OR 13C# OR 14C# OR C11# OR C13# OR C14# OR 18O#
L14 131 S L13 NOT ALTRO?
L15 76 S L14 AND ALPHA
L16 54 S L15 NOT BETA
L17 52 S L16 NOT ESTER
L18 51 S L17 NOT XYLITOL
L19 15 S L18 NOT (2 OR 3 OR 4 OR 6)
L20 12 S L19 NOT OC4/ES
L21 10 S L20 NOT C6/ES
L22 9 S L21 NOT PSICOSE
L23 7 S L22 NOT SORBOSE
L24 5 S L23 NOT (5 OR TAGATOSE)
L25 4 S L24 NOT ALLO?
L26 4 S L8,L25
E PULLULAN/CN
L27 1 S E3
E CYCLODEXTRIN/CN
L28 1 S E3
SEL RN L26
L29 75 S E1-E4/CRN
SEL RN L27
L30 132 S E5/CRN
L31 0 S L29 AND L30
SEL RN L28
L32 160 S E6/CRN
L33 0 S L29 AND L32
L34 0 S L29 AND ?CYCLODEXTRIN?/CNS

FILE 'HCAPLUS' ENTERED AT 12:59:25 ON 08 FEB 1999

L35 5216 S L26 OR TREHALOSE
L36 43 S L4-L7 AND L35
L37 2902 S L27 OR PULLULAN
L38 15808 S L28 OR CYCLODEXTRIN
L39 28 S DEXTRIN (L) CYCLO
L40 67 S DEXTRIN (L) CYCLIC
L41 38 S L35 AND L37

L42 86 S L35 AND L38-L40
 L43 4 S L41 AND L42
 L44 341 S L26 (L) (FFD/RL OR THU/RL)
 L45 7 S L37 AND L44
 L46 25 S L38-L40 AND L44

FILE 'REGISTRY' ENTERED AT 13:03:05 ON 08 FEB 1999
 L47 1 S 7782-44-7

FILE 'HCAPLUS' ENTERED AT 13:03:07 ON 08 FEB 1999
 L48 225137 S L47
 L49 8 S L44 AND L48
 L50 4 S L45, L46 AND L49
 L51 34 S L35 AND L48
 L52 23 S L35 AND ANTIOXID?
 L53 54 S L51, L52
 L54 23 S L53 AND (1 OR 62 OR 63 OR 17 OR 18)/SC, SX
 L55 4 S L54 AND FFD/RL
 L56 1 S L54 AND EDIBL?
 L57 0 S L54 AND CONSUM?
 L58 4 S L55, L56
 L59 2 S L36 AND L53
 L60 4 S L58, L59

FILE 'REGISTRY' ENTERED AT 13:07:09 ON 08 FEB 1999
 L61 1 S 9054-89-1

FILE 'HCAPLUS' ENTERED AT 13:07:13 ON 08 FEB 1999
 L62 15319 S L61
 L63 21564 S SUPEROXIDE DISMUTASE
 L64 17 S L62, L63 AND L35
 L65 6 S L64 AND L53
 L66 5 S L44 AND L64, L65
 L67 6 S L54 AND L64, L65
 L68 8 S L60, L65-L67
 L69 1 S L68 AND 9/SC
 L70 7 S L68 NOT L69
 L71 17 S L41, L42, L44, L53 AND VEGETABLE
 L72 2 S L71 AND ANTIOXID?
 L73 1 S L71 AND L48
 L74 7 S L70, L72, L73
 SEL HIT RN

FILE 'REGISTRY' ENTERED AT 13:12:14 ON 08 FEB 1999
 L75 5 S E7-E11

FILE 'REGISTRY' ENTERED AT 13:12:29 ON 08 FEB 1999

=> fil hcaplus

FILE 'HCAPLUS' ENTERED AT 13:13:05 ON 08 FEB 1999
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26, 1996), unless otherwise indicated in the original publications.

FILE COVERS 1967 - 8 Feb 1999 VOL 130 ISS 7
FILE LAST UPDATED: 8 Feb 1999 (19990208/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

This file supports REGISTRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

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L74 ANSWER 1 OF 7 HCAPLUS COPYRIGHT 1999 ACS
AN 1998:766507 HCAPLUS
DN 130:29221
TI Preparation of solid porous matrixes for pharmaceutical uses
IN Unger, Evan C.
PA Tmarx Pharmaceutical Corp., USA
SO PCT Int. Appl., 139 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K009-10
CC 63-6 (Pharmaceuticals)
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9851282	A1	19981119	WO 98-US9570	19980512
	W: AU, BR, CA, CN, JP, KR, NZ				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
PRAI	US 97-46379		19970513		
AB	A solid porous matrix formed from a surfactant, a solvent, and a bioactive agent is described. Thus, amphotericin nanoparticles were prepd. by using ZrO2 beads and a surfactant. The mixt. was milled for 24 h.				
ST	solid porous matrix pharmaceutical surfactant				
IT	Receptors				
	RL: BSU (Biological study, unclassified); BIOL (Biological study) (GPIIBIIIa; prepn. of solid porous matrixes for pharmaceutical uses)				
IT	Macrophage				
	(activation factor; prepn. of solid porous matrixes for pharmaceutical uses)				
IT	Steroids, biological studies				
	RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (acyl; prepn. of solid porous matrixes for pharmaceutical uses)				
IT	Ethers, biological studies				
	RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (diethers; prepn. of solid porous matrixes for pharmaceutical uses)				
IT	Natural products (pharmaceutical)				
	RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (digitalis; prepn. of solid porous matrixes for pharmaceutical uses)				
IT	Polyesters, biological studies				
	RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (dilactone-based; prepn. of solid porous matrixes for pharmaceutical uses)				
IT	Polyoxyalkylenes, biological studies				

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (ethers; prepn. of solid porous matrixes for pharmaceutical uses)

IT Polyesters, biological studies
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (lactic acid-based; prepn. of solid porous matrixes for pharmaceutical uses)

IT Ethers, biological studies
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (methoxyl; prepn. of solid porous matrixes for pharmaceutical uses)

IT Natural products (pharmaceutical)
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (opium; prepn. of solid porous matrixes for pharmaceutical uses)

IT Perfluoro compounds
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (perfluoroalkyl ethers; prepn. of solid porous matrixes for pharmaceutical uses)

IT Ethers, biological studies
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (perfluoroalkyl; prepn. of solid porous matrixes for pharmaceutical uses)

IT Polyethers, biological studies
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (poly(ortho esters); prepn. of solid porous matrixes for pharmaceutical uses)

IT Allergy inhibitors
 Anesthetics
 Angiotensin-converting enzyme inhibitors
 Anti-inflammatory drugs
 Antianginal agents
 Antibiotics
 Anticoagulants
 Antirheumatic drugs
 Antitumor agents
 Antiviral agents
 Blood products
 Coryneform bacteria
 Diabetic retinopathy
 Drug delivery systems
 Fungicides
 Hypnotics and Sedatives
 Microparticles (drug delivery systems)
 Mycobacterium
 Nanoparticles (drug delivery systems)
 Narcotics
 Neuromuscular blocking agents
 Nonionic surfactants
 Preservatives
 Protozoacides
 Tuberculostatics
 .beta.-Lactam antibiotics
 (prepn. of solid porous matrixes for pharmaceutical uses)

IT Ligands
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (prepn. of solid porous matrixes for pharmaceutical uses)

IT Albumins, biological studies
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (prepn. of solid porous matrixes for pharmaceutical uses)

IT Alkylbenzyltrimethylammonium chlorides
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(prepn. of solid porous matrixes for pharmaceutical uses)

IT Antiestrogens
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)

IT Canola oil
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)

IT Carbohydrates, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)

IT Collagens, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)

IT Corn oil
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)

IT Crown ethers
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)

IT Cyclic ethers
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)

IT Elastins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)

IT Endotoxins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)

IT Enkephalins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)

IT Enzymes, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)

IT Fibrins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)

IT Glycosides
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)

IT Hormones (animal), biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)

IT IgA
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)

IT IgG
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)

IT IgM
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)

IT Integrins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)

IT Interferon .alpha.
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)

IT Interferon .alpha.2a

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)

IT Interferon .alpha.2b
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)

IT Interferon .beta.
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)

IT Interferon .gamma.
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)

IT Interferons
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)

IT Interleukin 1
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)

IT Interleukin 10
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)

IT Interleukin 11
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)

IT Interleukin 12
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)

IT Interleukin 2
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)

IT Interleukin 3
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)

IT Interleukin 4
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)

IT Interleukin 5
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)

IT Interleukin 6
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)

IT Interleukin 7
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)

IT Interleukin 8
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)

IT Interleukin 9
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)

IT Interleukins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)

IT Lipids, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)

IT Lipopolysaccharides
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)

IT Lymphokines
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)

IT Lymphotoxin
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)

IT Monoclonal antibodies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)

IT Olive oil
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)

IT Peanut oil
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)

IT Peptides, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)

IT Perfluorocarbons
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)

IT Platelet-derived growth factors
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)

IT Polyethers, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)

IT Polymers, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)

IT Polyoxyalkylenes, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)

IT Polyphosphazenes
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)

IT Polysaccharides, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)

IT Porphyrins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)

IT Prostaglandins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)

IT Proteins (general), biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)

IT Retinoids
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)

IT Ricins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)

IT Safflower oil
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)

IT Terpenes, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(prepn. of solid porous matrixes for pharmaceutical uses)
IT Transforming growth factors
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)
IT Tumor necrosis factors
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)
IT Vitamins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)
IT 101479-70-3, Adaprolol
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Adaprolol; prepn. of solid porous matrixes for pharmaceutical uses)
IT 64228-81-5, Atracurium besilate
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Atracurium besilate; prepn. of solid porous matrixes for pharmaceutical uses)
IT 50-07-7, Mitomycin
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Mitomycin; prepn. of solid porous matrixes for pharmaceutical uses)
IT 9028-31-3, Aldose reductase 125978-95-2, Nitric oxide synthase
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(inhibitors; prepn. of solid porous matrixes for pharmaceutical uses)
IT 9081-34-9, 5.alpha.-Reductase
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(inhibitors; prepn. of solid porous matrixes for pharmaceutical uses)
IT 9031-44-1, Kinase
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(ligands for metalloprotein; prepn. of solid porous matrixes for pharmaceutical uses)
IT **9054-89-1, Superoxide dismutase**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(manganese-dependent; prepn. of solid porous matrixes for pharmaceutical uses)
IT 9001-12-1, Collagenase
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(prepn. of solid porous matrixes for pharmaceutical uses)
IT 591-93-5P, 1,4-Pentadiene 216245-34-0P
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)
IT 50-02-2, Dexamethasone 50-03-3, Hydrocortisone acetate 50-04-4, Cortisone acetate 50-23-7, Hydrocortisone 50-24-8, Prednisolone 50-28-2, Estradiol, biological studies 50-33-9, Phenylbutazone, biological studies 50-44-2, Mercaptopurine 50-67-9, 5-Hydroxytryptamine, biological studies 50-76-0, Dactinomycin 50-78-2, Aspirin 50-99-7, Glucose, biological studies 51-05-8, Procaine hydrochloride 51-61-6, Dopamine, biological studies 52-21-1, Prednisolone acetate 52-53-9, Verapamil 52-67-5, Penicillamine 52-86-8, Haloperidol 53-02-1 53-03-2, Prednisone 53-19-0, Mitotane 53-36-1, Methylprednisolone acetate 53-41-8D, Androsterone, aza derivs. 53-86-1, Indomethacin 54-05-7, Chloroquine 54-85-3, Isoniazid 55-63-0, Nitroglycerin 55-98-1, Busulfan 56-75-7, Chloramphenicol 56-81-5, Glycerol, biological studies 57-09-0, Cetyltrimethylammonium bromide 57-22-7, Vincristine 57-27-2, Morphine, biological studies 57-30-7, Phenobarbital sodium 57-33-0, Pentobarbital sodium 57-43-2, Amobarbital 57-48-7, Fructose, biological studies 57-50-1, Sucrose, biological studies 57-55-6, Propylene glycol, biological studies 57-83-0, Progesterone, biological studies 57-94-3, Tubocurarine chloride

58-22-0, Testosterone 58-32-2, Dipyridamole 58-82-2, Bradykinin
 59-02-9, .alpha.-Tocopherol 59-05-2, Methotrexate 59-23-4, Galactose,
 biological studies 59-30-3, Folic acid, biological studies 60-54-8,
 Tetracycline 61-32-5, Methicillin 61-33-6, biological studies
 61-68-7, Mefenamic acid 64-43-7, Amobarbital sodium 65-29-2, Gallamine
 triethiodide 65-49-6, Para-aminosalicylic acid 66-79-5, Oxacillin
 67-56-1, Methanol, biological studies 67-78-7, Triamcinolone diacetate
 67-97-0, Cholecalciferol 68-41-7, Cycloserine 69-53-4, Ampicillin
 69-72-7D, Salicylic acid, esters 70-18-8, Glutathione, biological
 studies 71-27-2, Succinylcholine chloride 71-63-6, Digitoxin
 71-73-8, Thiopental sodium 73-78-9, Lidocaine hydrochloride 74-82-8,
 Methane, biological studies 74-99-7, Propyne 75-00-3, Chloroethane
 75-10-5, Difluoromethane 75-18-3, Methyl sulfide 75-19-4, Cyclopropane
 75-29-6, Propane-2-chloro 75-31-0, 2-AminoPropane, biological studies
 75-34-3, 1,1-Dichloroethane 75-35-4, 1,1-Dichloroethylene, biological
 studies 75-43-4, Dichlorofluoromethane 75-45-6, Chlorodifluoromethane
 75-46-7, TriFluoromethane 75-56-9, Propane-1,2-epoxy, biological studies
 75-61-6, Dibromodifluoromethane 75-63-8, Bromotrifluoromethane
 75-69-4, Trichlorofluoromethane 75-71-8, Dichlorodifluoromethane
 75-72-9, Chlorotrifluoromethane 75-73-0, Perfluoromethane 76-13-1,
 1,1,2-Trichloro-1,2,2-Trifluoroethane 76-15-3, 1-Chloro-1,1,2,2,2-
 Pentafluoroethane 76-16-4, HexaFluoroethane 76-19-7, Octafluoropropane
 76-25-5, Triamcinolone acetonide 76-57-3, Codeine 76-74-4,
 Pentobarbital 76-99-3, Methadone 77-02-1, Aprobarbital 77-21-4,
 Glutethimide 78-11-5, Pentaerythritol tetranitrate 78-78-4,
 2-Methylbutane 78-79-5, 2-Methyl-1,3-Butadiene, biological studies
 78-80-8, 2-Methyl-1-Buten-3-yne 79-10-7D, Acrylic acid, esters, polymers
 79-17-4, Aminoguanidine 80-08-0, Dapsone 83-43-2, Methylprednisolone
 87-33-2, Isosorbide dinitrate 92-13-7, Pilocarpine 95-80-7,
 2,4-Diaminotoluene 96-40-2, 3-Chloro-cyclopentene 96-49-1,
 1,3-Dioxolan-2-one 98-96-4, Pyrazinamide 99-20-7,
Trehalose 103-90-2, Acetaminophen 106-98-9, 1-Butene,
 biological studies 106-99-0, 1,3-Butadiene, biological studies
 107-00-6, 1-Butyne 107-01-7, 2-Butene 107-25-5, Methyl vinyl ether
 109-66-0, n-Pentane, biological studies 109-67-1, 1-Pentene 109-92-2,
 Ethyl vinyl ether 109-93-3, Vinyl ether 111-02-4, Squalene 113-18-8,
 Ethchlorvynol 114-07-8, Erythromycin 115-07-1, Propene, biological
 studies 115-10-6, Methyl ether 115-25-3, OctafluoroCyclobutane
 115-44-6, Talbutal 116-15-4, Hexafluoropropylene 118-42-3,
 Hydroxychloroquine 122-18-9, Benzyltrimethylhexadecylammonium chloride
 122-57-6 123-03-5, Cetylpyridinium chloride 123-63-7, Paraldehyde
 124-03-8, Cetyltrimethylethylammonium bromide 124-40-3, Dimethylamine,
 biological studies 124-94-7, Triamcinolone 125-02-0, Prednisolone
 sodium phosphate 125-04-2, Hydrocortisone sodium succinate 125-64-4,
 Methpyrlylon 125-84-8, Aminogluthethimide 126-07-8, Griseofulvin
 126-52-3, Ethinamate 129-20-4, Oxyphenbutazone 130-15-4,
 1,4-Naphthalenedione 130-95-0, Quinine 133-51-7, Meglumine antimonate
 135-16-0 136-47-0, Tetracaine hydrochloride 139-07-1,
 Benzyltrimethyldodecylammonium chloride 139-08-2,
 Benzyltrimethyltetradecylammonium chloride 140-72-7, Cetylpyridinium
 bromide 143-67-9, Vinblastine sulfate 143-81-7, Butabarbital sodium
 147-52-4, Nafcillin 147-94-4, Cytosine arabinoside 148-82-3, Melphalan
 151-73-5, Betamethasone sodium phosphate 154-21-2, Lincomycin
 287-23-0, Cyclobutane 302-17-0, Chloral hydrate 305-03-3 307-34-6,
 Perfluorooctane 307-45-9, Perfluorodecane 309-36-4, Methohexital
 sodium 309-43-3, Secobarbital sodium 317-52-2, Hexafluorenum bromide
 334-99-6, NitrosotriFluoromethane 335-02-4, NitrotriFluoromethane
 335-05-7, Trifluoromethanesulfonyl fluoride 335-57-9, Perfluoroheptane
 338-65-8, 2-Chloro-1,1-Difluoroethane 350-51-6, 3-Fluorostyrene

353-36-6, Fluoroethane 353-85-5, Trifluoroacetonitrile 353-87-7,
 BromodifluoronitrosoMethane 354-72-3, Nitrosopentafluoroethane
 354-80-3, Perfluoroethylamine 354-81-4, Nitropentafluoroethane
 355-25-9, Decafluorobutane 355-42-0, Perfluorohexane 355-79-3,
 Perfluorotetrahydropyran 357-26-6, Perfluoro-1-Butene 359-35-3,
 1,1,2,2-Tetrafluoroethane 360-89-4, Octafluoro-2-butene 366-70-1,
 Procarbazine-hydrochloride 371-67-5, 1,1,1-Trifluoro-diazoethane
 371-77-7 371-78-8, Trifluoromethyl sulfide 373-52-4,
 Bromofluoromethane 374-07-2, 1,1-Dichloro-1,2,2,2-Tetrafluoroethane
 375-96-2, Perfluorononane 376-87-4, Perfluoro-1-pentene 378-44-9,
 Betamethasone 420-45-1, Propane-2,2-difluoro 420-46-2,
 1,1,1-Trifluoroethane 421-17-0, Trifluoromethanesulfenylchloride
 421-83-0, Trifluoromethanesulfonyl chloride 423-26-7 423-33-6
 435-97-2, Phenprocoumon 443-48-1, Metronidazole 460-12-8, Diacetylene
 461-68-7, TetrafluoroAllene 463-49-0, Allene 463-58-1, Carbonyl
 sulfide 463-82-1, Neopentane 503-17-3, 2-Butyne 508-99-6,
 Hydrocortisone cypionate 514-36-3, Fludrocortisone acetate 525-66-6,
 Propranolol 536-33-4, Ethionamide 547-64-8, Methyl lactate 548-73-2,
 Droperidol 557-98-2, 2-Chloropropylene 559-40-0,
 Octafluorocyclopentene 561-27-3, Heroin 563-45-1, 3-Methyl-1-Butene
 563-46-2, 2-Methyl-1-Butene 582-24-1D, Benzoylcarbinol, salts
 590-19-2, 1,2-Butadiene 590-21-6, 1-ChloroPropylene 593-53-3,
 Fluoromethane 593-70-4, Chlorofluoromethane 593-98-6,
 Bromochlorofluoromethane 594-11-6, MEthylCyclopropane 595-33-5,
 Megestrol acetate 598-23-2, 3-Methyl-1-Butyne 598-53-8, Methyl
 isopropyl ether 598-56-1 598-61-8, MethylCyclobutane 624-72-6,
 1,2-Difluoroethane 624-91-9, Methyl nitrite 625-04-7,
 2-Pentanone-4-amino-4-methyl 627-20-3, cis-2-Pentene 632-58-6,
 Phthalic acid-tetrachloro 644-62-2

RL: **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
 (prepn. of solid porous matrixes for pharmaceutical uses)

IT 646-04-8, trans-2-Pentene 661-54-1, Propyne-3,3,3-trifluoro 661-97-2
 677-56-5, Propane-1,1,1,2,2,3-hexafluoro 678-26-2, Perfluoropentane
 684-16-2, Hexafluoroacetone 685-63-2, Hexafluoro-1,3-butadiene
 689-97-4, Vinyl acetylene 692-50-2, Hexafluoro-2-butyne 752-61-4,
 Digitalin 768-94-5, Amantadine 818-92-8, 3-FluoroPropylene 846-50-4,
 Temazepam 921-13-1, Chlorodinitromethane 927-84-4, Trifluoromethyl
 peroxide 928-45-0, Butyl nitrate 968-93-4, Testolactone 987-24-6,
 Betamethasone acetate 990-73-8, Fentanyl citrate 1070-11-7, Ethambutol
 hydrochloride 1119-94-4, Lauryltrimethylammonium bromide 1119-97-7,
 Myristyltrimethylammonium bromide 1172-18-5 1177-87-3, Dexamethasone
 acetate 1191-96-4, EthylCyclopropane 1306-06-5, Hydroxylapatite
 1397-89-3, Amphoteracin B 1400-61-9, Nystatin 1404-04-2, Neomycin
 1405-37-4, Capreomycin sulfate 1493-03-4, Difluoroiodomethane
 1597-82-6, Paramethasone acetate 1630-94-0, 1,1-DimethylCyclopropane
 1691-13-0, 1,2-Difluoroethylene 1722-62-9, Mepivacaine hydrochloride
 1759-88-2 1867-66-9, Ketamine hydrochloride 2022-85-7, Flucytosine
 2068-78-2, Vincristine sulfate 2314-97-8, IodotriFluoromethane
 2366-52-1, 1-Fluorobutane 2375-03-3, Methylprednisolone sodium succinate
 2392-39-4, Dexamethasone sodium phosphate 2511-95-7,
 1,2-DimethylCyclopropane 2551-62-4, Sulfur hexafluoride 3116-76-5,
 Dicloxacillin 3385-03-3, Flunisolid 3458-28-4, Mannose 3485-14-1,
 Cyclacillin 3511-16-8, Hetacillin 3529-04-2,
 Benzyltrimethylhexadecylammonium bromide 3810-74-0, Streptomycin sulfate
 3858-89-7, Chloroprocaine hydrochloride 4185-80-2, Methotrimeprazine
 hydrochloride 4428-95-9, Foscarnet 4431-00-9, Aurintricarboxylic acid
 4697-36-3, Carbenicillin 4786-20-3, Crotononitrile 4901-75-1,
 3-Ethyl-3-methyldiaziridine 5534-09-8, Beclomethasone dipropionate
 5536-17-4, Arabinosyl adenine 5611-51-8, Triamcinolone hexacetonide

5714-22-7, Sulfur fluoride (S2F10) 6000-74-4, Hydrocortisone sodium phosphate 7281-04-1, Benzyldimethyldodecylammonium bromide 7297-25-8, Erythritol tetranitrate 7439-89-6, Iron, biological studies 7440-01-9, Neon, biological studies 7440-06-4D, Platinum, compds. 7440-15-5, Rhenium, biological studies 7440-24-6, Strontium, biological studies 7440-26-8, Technetium, biological studies 7440-48-4, Cobalt, biological studies 7440-63-3, Xenon, biological studies 7440-65-5, Yttrium, biological studies 7601-55-0, Metocurine iodide 7637-07-2, biological studies 7647-14-5, Sodium chloride, biological studies 7681-14-3, Prednisolone tebutate 7727-37-9, Nitrogen, biological studies 7728-73-6 7782-41-4, Fluorine, biological studies 7782-44-7, Oxygen, biological studies 7783-82-6, Tungsten hexafluoride 9001-75-6, Pepsin 9001-78-9, Alkaline phosphatase 9002-01-1, Streptokinase 9002-04-4, Thrombin 9002-60-2, Adrenocorticotrophic hormone, biological studies 9002-61-3 9002-72-6, Growth hormone 9002-79-3, Melanocyte stimulating hormone 9002-89-5, Poly(vinyl alcohol) 9003-11-6 9003-39-8, PVP 9004-10-8, Insulin, biological studies 9004-34-6, Cellulose, biological studies 9004-54-0, Dextran, biological studies 9004-61-9, Hyaluronic acid 9004-67-5, Methyl Cellulose 9005-25-8, Starch, biological studies 9005-27-0, HETA-starch 9005-32-7, Alginic acid 9005-49-6, Heparin, biological studies 9005-64-5, Polyoxyethylene sorbitan monolaurate 9005-65-6, Polyoxyethylene sorbitan monooleate 9005-66-7, Polyoxyethylene sorbitan monopalmitate 9005-67-8, Polyoxyethylene sorbitan monostearate 9005-71-4, Polyoxyethylene sorbitan tristearate 9007-12-9, Calcitonin 9007-92-5, Glucagon, biological studies 9011-14-7, PMMA 9011-97-6, Cholecystokinin 9015-68-3, Asparaginase 9015-71-8, Corticotropin releasing factor 9036-19-5, Octoxynol 9039-53-6, Urokinase 9061-61-4, Nerve growth factor 10024-97-2, Nitrous oxide, biological studies 11000-17-2, Vasopressin 11056-06-7, Bleomycin 11096-26-7, Erythropoietin 13264-41-0, Cetyldimethylethylammonium chloride 13292-46-1, Rifampin 13311-84-7, Flutamide 13647-35-3, Trilostane 15500-66-0, Pancuronium bromide 15663-27-1, Cisplatin 15686-71-2, Cephalexin 15687-27-1, Ibuprofen 16009-13-5, Hemin 16136-85-9 17598-65-1, Deslanoside 18010-40-7, Bupivacaine hydrochloride 18323-44-9, Clindamycin 18378-89-7, Plicamycin 18773-88-1, Benzyldimethyltetradecylammonium bromide 20187-55-7, Bendazac 20274-91-3 20830-75-5, Digoxin 21829-25-4, Nifedipine 22204-53-1, Naproxen 22494-42-4, Diflunisal 22916-47-8, Miconazole 23110-15-8, Fumagillin 23541-50-6, Daunorubicin hydrochloride 24356-66-9 24764-97-4, 2-Bromobutyraldehyde 24991-23-9 25104-18-1, Polylysine 25151-81-9, Prostanic acid 25316-40-9, Adriamycin 25322-68-3, PEG 25322-68-3D, PEG, ethers 25322-69-4, Polypropylene glycol 25513-46-6, Polyglutamic acid 26023-30-3, Poly[oxy(1-methyl-2-oxo-1,2-ethanediyl)] 26100-51-6, Poly(lactic acid) 26171-23-3, Tolmetin 26780-50-7, Glycolide-lactide copolymer 26787-78-0, Amoxicillin 26839-75-8, Timolol 28911-01-5, Triazolam 29121-60-6, Vaninolol 29767-20-2, Teniposide 30516-87-1, Azidothymidine 31637-97-5, Etofibrate 33069-62-4, Taxol 33125-97-2, Etomidate 33419-42-0, Etoposide 33507-63-0, Substance p 34077-87-7, DiChlorotrifluoroethane 34787-01-4, Ticarcillin 36322-90-4, Piroxicam 36637-19-1, Etidocaine hydrochloride 36791-04-5, Ribavirin 38000-06-5, Polylysine 38194-50-2, Sulindac 38821-53-3, Cephadrine 39391-18-9, Cyclooxygenase 41575-94-4, Carboplatin 42399-41-7, Diltiazem 47141-42-4, Levobunolol 50370-12-2, Cefadroxil 50402-72-7, Piperidine-2,3,6-trimethyl 50700-72-6, Vecuronium bromide 50972-17-3, Bacampicillin 51264-14-3, Amsacrine 52205-73-9, Estramustine phosphate sodium 52365-63-6, Dipivefrin 53045-71-9, 1-Pentene-3-bromo 53188-07-1, Trolox 53678-77-6, Muramyl dipeptide 53994-73-3, Cefaclor 54965-24-1, Tamoxifen citrate 55142-85-3, Ticlopidine 57223-18-4,

1-Nonen-3-yne 59277-89-3, Acyclovir 59467-96-8, Midazolam hydrochloride 60118-07-2, Endorphin 62031-54-3, Fibroblast growth factor 62229-50-9, Epidermal growth factor 62232-46-6, Bifemelane hydrochloride 62571-86-2, Captopril 62683-29-8, Colony stimulating factor 63659-18-7, Betaxolol 65277-42-1, Ketoconazole 68302-57-8, 68367-52-2, Sorbinil 69279-90-9, Ansamitocin 72702-95-5, Ponalrestat 73218-79-8, Apraclonidine hydrochloride 73984-11-9 74381-53-6, Leuprolide acetate 74790-08-2, Spiroplatin 75847-73-3, Enalapril 76547-98-3, Lisinopril 77181-69-2, Sorivudine 80755-87-9 81486-22-8, Nipradilol 82159-09-9, Epalrestat 82410-32-0, Ganciclovir 82964-04-3, Tolrestat 83869-56-1, Granulocyte macrophage colony stimulating factor 86090-08-6, Angiostatin 88096-12-2 89149-10-0, 15-Deoxyspergualin 98023-09-7 99896-85-2 106956-32-5, Oncostatin M 113852-37-2, Cidofovir 116632-15-6, 1.2.3-Nonadecanetricarboxylic acid 2-hydroxytrimethylester 119813-10-4, Carzelesin 120279-96-1, Dorzolamide 120287-85-6D, Cetrorelix, derivs. 121181-53-1, Filgrastim 124389-07-7, Muramyltripectide 127464-60-2, Vascular endothelial growth factor

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(prepn. of solid porous matrixes for pharmaceutical uses)

IT 127984-74-1, Somatuline 130209-82-4, Latanoprost 139639-23-9, Tissue plasminogen activator 141436-78-4, Protein kinase c 143011-72-7, Granulocyte colony stimulating factor 148717-90-2, Squalamine 163702-07-6, Perfluorobutylmethyl ether 169939-94-0, LY333531 216245-16-8 216245-28-2 216245-32-8 216382-88-6 216441-58-6

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(prepn. of solid porous matrixes for pharmaceutical uses)

IT 9001-92-7, Protease

RL: BSU (Biological study, unclassified); BIOL (Biological study)

(receptors; prepn. of solid porous matrixes for pharmaceutical uses)

L74 ANSWER 2 OF 7 HCAPLUS COPYRIGHT 1999 ACS

AN 1998:758924 HCAPLUS

DN 130:62454

TI Characteristics and utilization of **trehalose**

AU Saito, Noriyuki

CS Dev. Cent., Hayashibara Biochem. Lab., Inc., Okayama, 700, Japan

SO BRAIN Techno News (1998), 70, 1-4

CODEN: BTEEEC

PB Seibutsukei Tokutei Sangyo Gijutsu Kenkyu Suishin Kiko

DT Journal; General Review

LA Japanese

CC 6-0 (General Biochemistry)

Section cross-reference(s): 1, 16, 17

AB A review with 13 refs. on **trehalose** structure, manuf., structure, phys. and chem. properties, and its application in food processing, **antioxidant** stabilization, prevention of tooth decay, and bone metab.

ST review **trehalose** property utilization

IT 99-20-7P, **Trehalose**

RL: BAC (Biological activity or effector, except adverse); BMF

(Bioindustrial manufacture); FFD (Food or feed use); PRP

(Properties); THU (Therapeutic use); BIOL (Biological study); PREP

(Preparation); USES (Uses)

(characteristics and utilization of **trehalose**)

L74 ANSWER 3 OF 7 HCAPLUS COPYRIGHT 1999 ACS

AN 1998:668085 HCAPLUS

DN 129:293888

TI Reduction inhibitory agent for active-oxygen eliminating activity

IN **Aga, Hajime; Shibuya, Takashi; Fukuda, Shigeharu; Miyake, Toshio**

PA Kabushiki Kaisha Hayashibara Seibutsu Kagaku Kenkyujo, Japan

SO Eur. Pat. Appl., 23 pp.

CODEN: EPXXDW

DT Patent

LA English

IC ICM A61K031-70

CC 63-6 (Pharmaceuticals)

Section cross-reference(s): 1, 17

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 868916	A2	19981007	EP 98-301575	19980303
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				

PRAI JP 97-63987 19970304

JP 98-17647 19980114

AB A redn. inhibitory agent for active-oxygen eliminating activity which comprises **trehalose** (I) as an effective ingredient, a method for inhibiting the redn. of active-oxygen eliminating activity which comprises incorporating either **trehalose** or the redn. inhibitory agent into plant **edible** products and/or plant **antioxidants**, and a compn. where the redn. of active-oxygen eliminating activity of the plant **edible** products and/or plant **antioxidants** is satisfactorily inhibited by the method. Fresh carrots were disrupted by a mixer and 10% of different saccharides, including I, was added to the mixt. and dissolved therein. The soln. was dried and pulverized into a powdery compn. About 100 g of the compn., was placed and sealed in a container and stored at 40.degree. for seven days. I had the highest residual percentage (66%) for active-oxygen eliminating activity per g of either of the compns. before and after the storage. A tablet contained ascorbic acid 20, cryst. .beta.-maltose 13, corn starch 4, a mixt of plantain and **trehalose** 3 parts. The tablet had an oxygen eliminating activity of over 560 units/g product and could be orally used for removing fever and maintaining/controlling stomach and intestinal conditions.

ST **trehalose** redn inhibition active oxygen elimination;
pharmaceutical tablet **trehalose** fever intestine disease

IT **Vegetable**
(**edible** products; redn. inhibitory agent for active-oxygen eliminating activity)

IT **Fibers**
RL: BUU (Biological use, unclassified); **FFD (Food or feed use)**;
THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**edible**; redn. inhibitory agent for active-oxygen eliminating activity)

IT **Aloe barbadensis**

Antioxidants

Apple

Artemisia

Beefsteak plant

Bifidobacterium

Cabbage

Carrot

Chewing gum

Chinese cabbage

Citrus medica

Cosmetics
 Cucumber (*Cucumis sativus*)
 Daikon radish
 Drug delivery systems
 Eggplant (*Solanum melongena*)
 Food
 Ginger
 Hizikia fusiforme
 Lentinula edodes
 Nutrition (animal)
 Ointments (drug delivery systems)
 Onion (*Allium cepa*)
 Pigments (nonbiological)
 Plantago asiatica
 Reduction
 Saururaceae
 Skin creams
 Soybean (*Glycine max*)
 Spinach (*Spinacia oleracea*)
 Squash (*Cucurbita*)
 Tablets (drug delivery systems)
 (redn. inhibitory agent for active-oxygen eliminating activity)
 IT Enzymes, biological studies
 Minerals, biological studies
 Oligosaccharides, biological studies
 Polyphenols (nonpolymeric)
 Vitamins
 RL: BUU (Biological use, unclassified); **FFD (Food or feed use)**;
 THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (redn. inhibitory agent for active-oxygen eliminating activity)
 IT Bath preparations
 (salts; redn. inhibitory agent for active-oxygen eliminating activity)
 IT 149-91-7, Gallicacid, biological studies 154-23-4, Catechin 520-26-3D,
 Hesperidin, derivs. **9054-89-1, Superoxide**
dismutase 130603-71-3, .alpha.-Glucosyl rutin
 RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
 (redn. inhibitory agent for active-oxygen eliminating activity)
 IT **7782-44-7, Oxygen**, biological studies
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
 (Biological study); PROC (Process)
 (redn. inhibitory agent for active-oxygen eliminating activity)
 IT **99-20-7, Trehalose** 9005-25-8, Rice ;starch, biological
 studies **9057-02-7, Pullulan** 12619-70-4,
Cyclodextrin
 RL: BUU (Biological use, unclassified); **FFD (Food or feed use)**;
THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (redn. inhibitory agent for active-oxygen eliminating activity)
 L74 ANSWER 4 OF 7 HCAPLUS COPYRIGHT 1999 ACS
 AN 1998:192437 HCAPLUS
 DN 128:269738
 TI Stabilization by **trehalose** of **superoxide**
dismutase-like activity of various **vegetables**
 AU **Aga, Hajime; Shibuya, Takashi; Chaen, Hiroto;**
Fukuda, Shigeharu; Kurimoto, Masashi
 CS Amase Inst., Hayashibara Biochem. Lab., Inc., Okayama, 700-0834, Japan
 SO Nippon Shokuhin Kagaku Kogaku Kaishi (1998), 45(3), 210-215
 CODEN: NSKKEF; ISSN: 1341-027X
 PB Nippon Shokuhin Kagaku Kogakkai

DT Journal
 LA Japanese
 CC 17-6 (Food and Feed Chemistry)
 AB The effect of **trehalose** on the **superoxide dismutase** (SOD)-like activity of various **vegetables** was investigated. Six hundred g of minced carrot and 66 g of **trehalose** were mixed and dried in vacuo at 40.degree. for 40 h. The drying matter was powd. and then preserved at 40.degree. for 7 d. The remaining SOD-like activity of the powder was higher than that of the carrot powder alone. **Trehalose** was the most effective in stabilizing SOD-like activity among various saccharides tested, such as glucose, sorbitol, mannitol, maltose, and sucrose. The same effect was obsd. with other **vegetable** powders. **Trehalose** seems to stabilize both SOD and antioxidants in **vegetables**.
 ST **trehalose** stabilization **superoxide dismutase** **vegetable**
 IT **Antioxidants**
 Food additives
 (effect of various saccharides on **superoxide dismutase**-like activity and **antioxidants**)
 IT Disaccharides
 Monosaccharides
 RL: FFD (**Food or feed use**); BIOL (Biological study); USES (Uses)
 (effect of various saccharides on **superoxide dismutase**-like activity and **antioxidants**)
 IT Cabbage
 Carrot
 Cucumber (Cucumis sativus)
 Eggplant (Solanum melongena)
 Onion (Allium cepa)
 Radish (Raphanus sativus)
 Spinach (Spinacia oleracea)
 Squash (Cucurbita)
 (stabilization by **trehalose** of **superoxide dismutase**-like activity of various **vegetables**)
 IT 149-91-7, Gallic acid, biological studies 154-23-4, D-Catechin
 130603-71-3, .alpha.-Glucosylrutin 161713-86-6
 RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
 (effect of various saccharides on **superoxide dismutase**-like activity and **antioxidants**)
 IT 50-70-4, Sorbitol, biological studies 50-99-7, D-Glucose, biological studies 57-50-1, Sucrose, biological studies 69-65-8, Mannitol
 69-79-4, Maltose
 RL: FFD (**Food or feed use**); BIOL (Biological study); USES (Uses)
 (effect of various saccharides on **superoxide dismutase**-like activity and **antioxidants**)
 IT 9054-89-1, **Superoxide dismutase**
 RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
 (stabilization by **trehalose** of **superoxide dismutase**-like activity of various **vegetables**)
 IT 99-20-7, **Trehalose**
 RL: FFD (**Food or feed use**); BIOL (Biological study); USES (Uses)
 (stabilization by **trehalose** of **superoxide dismutase**-like activity of various **vegetables**)
 L74 ANSWER 5 OF 7 HCAPLUS COPYRIGHT 1999 ACS
 AN 1997:731707 HCAPLUS
 DN 128:16289
 TI Compositions for external use

IN Kondo, Chiharu; Senoo, Masami
 PA Kosei Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 23 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM A61K007-00
 ICS A61K007-00; A61K007-42; A61K007-48
 CC 62-4 (Essential Oils and Cosmetics)
 Section cross-reference(s): 63

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 09291011	A2	19971111	JP 96-127955	19960424
AB	Compns. [cosmetics or topical prepns.] for external use comprise: (A) apple exts. and (B) tyrosinase inhibitors, active oxygen scavengers, antioxidants , cell activators, antiinflammatories and/or moisturizers. A skin-care and antiaging lotion contained glycerin 5.0, 1,3-butylene glycol 6.5, POE sorbitan monolaurate 1.2, ethanol 8.0, apple exts. 0.01, superoxide dismutase 0.01, preservatives, perfumes, and purified water to 100 %.				
ST	skin cosmetic apple ext tyrosinase inhibitor; active oxygen scavenger apple ext cosmetic; antioxidant apple ext cosmetic; cell activator apple ext cosmetic; antiinflammatory moisturizer apple ext cosmetic				
IT	Animal cells (activators; skin-care cosmetics contg. apple exts. and other substances)				
IT	Apple (exts.; skin-care cosmetics contg. apple exts. and other substances)				
IT	Carboxylic acids, biological studies RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (hydroxy; skin-care cosmetics contg. apple exts. and other substances)				
IT	Plant (Embryophyta) (medicinal, exts.; skin-care cosmetics contg. apple exts. and other substances)				
IT	Cosmetics (packs; skin-care cosmetics contg. apple exts. and other substances)				
IT	Anti-inflammatory drugs Antiaging cosmetics Antioxidants Cosmetic emulsions Cosmetic gels Cosmetics Lotions (cosmetics) Moisturizers (cosmetics) Ointments (drug delivery systems) Skin cleansers Skin creams Topical drug delivery systems (skin-care cosmetics contg. apple exts. and other substances)				
IT	Carotenes, biological studies Collagens, biological studies DNA Elastins Mucopolysaccharides, biological studies Proteins (general), biological studies RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL				

(Biological study); USES (Uses)
 (skin-care cosmetics contg. apple exts. and other substances)

IT Hair conditioners
 (tonics; skin-care cosmetics contg. apple exts. and other substances)

IT 7782-44-7, Oxygen, biological studies
 RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)
 (active, scavengers; skin-care cosmetics contg. apple exts. and other substances)

IT 9002-10-2, Tyrosinase
 RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)
 (inhibitors; skin-care cosmetics contg. apple exts. and other substances)

IT 50-28-2, Estradiol, biological studies 50-33-9, Phenylbutazone, biological studies 50-70-4, Sorbitol, biological studies 50-81-7, Vitamin c, biological studies 52-90-4D, Cysteine, derivs. 53-86-1, Indomethacin 56-65-5, Atp, biological studies 57-13-6, Urea, biological studies 57-88-5, Cholesterol, biological studies 60-32-2, .epsilon.-Aminocaproic acid 61-19-8, Amp, biological studies 61-68-7, Mefenamic acid 69-65-8, Mannitol 69-72-7, Salicylic acid, biological studies 69-89-6, Xanthine 70-18-8, Glutathione, biological studies 71-00-1, Histidine, biological studies 73-22-3, Tryptophan, biological studies 73-40-5, Guanine 79-14-1, Glycolic acid, biological studies 87-89-8, myo-Inositol 97-59-6, Allantoin 98-79-3, Pyrrolidonecarboxylic acid 99-20-7 110-15-6, Butanedioic acid, biological studies 117-39-5, Quercetin 120-80-9, 1,2-Benzenediol, biological studies 123-31-9, Hydroquinone, biological studies 128-37-0, Bht, biological studies 149-91-7, Gallic acid, biological studies 463-40-1 471-53-4, Glycyrrhetic acid 489-84-9, Guaiazulene 499-44-5, Hinokitiol 506-26-3, .gamma.-Linolenic acid 522-12-3, Quercitrin 635-65-4, Bilirubin, biological studies 1314-13-2, Zinc oxide, biological studies 1406-16-2, Vitamin d 1406-18-4, Vitamin e 7235-40-7, .beta.-Carotene 9004-61-9, Hyaluronic acid 9005-49-6, Heparin, biological studies 9007-28-7, Chondroitin sulfate 9050-30-0, Heparan sulfate 9054-89-1, **Superoxide dismutase** 9056-36-4, Keratan sulfate 10417-94-4, Eicosapentaenoic acid 11103-57-4, Vitamin a 12001-76-2, Vitamin b 15307-79-6, Diclofenac sodium salt 15687-27-1, Ibuprofen 22071-15-4, Ketoprofen 24967-94-0, Dermatan sulfate 25013-16-5, Bha 103000-77-7, Glycyrrhetic acid 169799-44-4, Keratin
 RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (skin-care cosmetics contg. apple exts. and other substances)

L74 ANSWER 6 OF 7 HCAPLUS COPYRIGHT 1999 ACS
 AN 1997:684491 HCAPLUS
 DN 127:343339
 TI Stabilized **superoxide dismutase** products for use in cosmetic, pharmaceutical and agri-food compositions
 IN Bresson-Rival, Delphine; Boivin, Patrick; Linden, Guy; Perrier, Eric; Humbert, Gerard
 PA Coletica, Fr.
 SO PCT Int. Appl., 48 pp.
 CODEN: PIXXD2
 DT Patent
 LA French
 IC ICM C12N009-02
 ICS C12N009-08; C12N009-96; A23L001-015; A23L001-03; A23L001-211;

A23L003-3571; A61K007-48; A61K038-44

CC 7-3 (Enzymes)

Section cross-reference(s): 1, 17, 62

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9738095	A1	19971016	WO 97-FR603	19970403
	W: JP, KR				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	FR 2747044	A1	19971010	FR 96-4165	19960403
	FR 2747044	B1	19980626		
	EP 891422	A1	19990120	EP 97-919477	19970403
	R: CH, DE, ES, FR, GB, LI				
PRAI	FR 96-4165		19960403		
	WO 97-FR603		19970403		

AB A **superoxide dismutase** (SOD) is disclosed. Germinated plant seeds are used in accordance with the invention as a source of SOD which can thereafter be complexed with a peroxidase and a enzyme cofactor. Cosmetic, pharmaceutical or agri-food compns. having anti-free radical activity can thus be obtained. SOD was isolated from germinated plant seeds. The effect of genus-species and variety of plant, time of germination, and presence of gibberellins were examd. The SOD was stabilized with a peroxidase, a cofactor (such as uric acid), and, optionally, with a sugar or polyol and an **antioxidant** such as tocopherols. An SOD compn. prepd. according to the invention was incorporated into a cosmetic emulsion. The SOD lost only 40% of its initial activity after 40 days at 20.degree., and lost only 50% activity after 40 days at 45.degree..

ST **superoxide dismutase** stabilization peroxidase
cofactor; free radical destruction cosmetic pharmaceutical food

IT Barley
Cereal (grain)
Legume (Fabaceae)
Lentil
Pea
Soybean (Glycine max)
Wheat

(SOD isolation from germinated seeds of; stabilized **superoxide dismutase** products for use in cosmetic, pharmaceutical and agri-food compns.)

IT Seed
(SOD isolation from germinated; stabilized **superoxide dismutase** products for use in cosmetic, pharmaceutical and agri-food compns.)

IT Plant (Embryophyta)
(oleaginous, SOD isolation from germinated seeds of; stabilized **superoxide dismutase** products for use in cosmetic, pharmaceutical and agri-food compns.)

IT **Antioxidants**
Cosmetics
Drugs
Feed
Food
(stabilized **superoxide dismutase** products for use in cosmetic, pharmaceutical and agri-food compns.)

IT Carbohydrates, uses
Disaccharides
Iodides, uses
Monosaccharides

Polyhydric alcohols

Tocopherols

RL: MOA (Modifier or additive use); USES (Uses)

(stabilized **superoxide dismutase** products for use
in cosmetic, pharmaceutical and agri-food compns.)

IT **9054-89-1P, Superoxide dismutase**

RL: BAC (Biological activity or effector, except adverse); BUU (Biological use, unclassified); FFD (Food or feed use); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(stabilized **superoxide dismutase** products for use
in cosmetic, pharmaceutical and agri-food compns.)

IT 50-70-4, Sorbitol, uses 50-81-7, Ascorbic acid, uses 56-81-5, Glycerol, uses 62-53-3, Aniline, uses 69-65-8, Mannitol 69-93-2, Uric acid, uses 70-18-8, Glutathione, uses 77-09-8, Phenolphthalein 87-66-1, Pyrogallol 88-05-1, Mesidine 90-05-1, Guaiacol 95-54-5, o-Phenylenediamine, uses 99-20-7, Trehalose 106-49-0, p-Toluidine, uses 108-95-2, Phenol, uses 526-84-1, Dihydroxymaleic acid 527-60-6, Mesitol 585-88-6, Maltitol 9003-99-0, Peroxidase 9007-43-6, Cytochrome C, uses 9013-66-5, Glutathione peroxidase 26281-43-6, 3,5-Dichloro-2-hydroxybenzenesulfonic acid 28752-68-3, ABTS

RL: MOA (Modifier or additive use); USES (Uses)

(stabilized **superoxide dismutase** products for use
in cosmetic, pharmaceutical and agri-food compns.)

L74 ANSWER 7 OF 7 HCAPLUS COPYRIGHT 1999 ACS

AN 1997:684267 HCAPLUS

DN 127:341811

TI Correction of genetic defects using chemical chaperones

IN Welch, William J.; Brown, C. Randell; Tatzelt, Jorg

PA Regents of the University of California, USA; Welch, William J.; Brown, C. Randell; Tatzelt, Jorg

SO PCT Int. Appl., 86 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM A61K031-135

CC 1-12 (Pharmacology)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9737645	A1	19971016	WO 97-US5846	19970409
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9724485	A1	19971029	AU 97-24485	19970409
PRAI	US 96-15155		19960410		
	WO 97-US5846		19970409		
AB	A method for stabilizing intracellular proteins known to cause disease, said method comprising contacting a cell with stabilizing agents such as DMSO, sugars, amino acids and TMAO (trimethylamine N-oxide), wherein the proteins are stabilized and the disease state lessened.				
ST	genetic disease conformation therapy chaperone chem				

IT Nervous system diseases
 (Gerstmann-Straussler syndrome; correction of genetic defects using
 chem. chaperones)

IT Alzheimer's disease
 Amyotrophic lateral sclerosis
 Antitumor agents
 Cataract
 Chronic liver diseases
 Conformation (protein)
 Creutzfeldt-Jakob disease
 Emphysema
 Familial hypercholesterolemia
 Marfan syndrome
 Osteogenesis imperfecta
 Retinitis pigmentosa
 Scrapie
 Scurvy
 Spongiform encephalopathy
 Stabilizing agents
 Tay-Sachs disease
 Tumors (animal)
 (correction of genetic defects using chem. chaperones)

IT .beta.-Amyloid
 RL: ADV (Adverse effect, including toxicity); BPR (Biological process);
 PRP (Properties); BIOL (Biological study); PROC (Process)
 (correction of genetic defects using chem. chaperones)

IT Chaperonins
 RL: BAC (Biological activity or effector, except adverse); BPR (Biological
 process); THU (Therapeutic use); BIOL (Biological study); PROC (Process);
 USES (Uses)
 (correction of genetic defects using chem. chaperones)

IT Amino acids, biological studies
 Carbohydrates, biological studies
 Polyhydric alcohols
 Polyoxyalkylenes, biological studies
 RL: BAC (Biological activity or effector, except adverse); THU
 (Therapeutic use); BIOL (Biological study); USES (Uses)
 (correction of genetic defects using chem. chaperones)

IT Insomnia
 (fatal familial; correction of genetic defects using chem. chaperones)

IT Endocrine diseases
 (leprechaunism; correction of genetic defects using chem. chaperones)

IT Mental disorders
 (maple syrup urine disease; correction of genetic defects using chem.
 chaperones)

IT CFTR (cystic fibrosis transmembrane conductance regulator)
 Collagens, biological studies
 Crystallins
 Fibrillins
 Insulin receptors
 LDL receptors
 Prion protein PrPc
 Prion protein PrPSc
 Prion proteins
 Rhodopsins
 p53 (protein)
 RL: ADV (Adverse effect, including toxicity); BPR (Biological process);
 PRP (Properties); BIOL (Biological study); PROC (Process)
 (mutant; correction of genetic defects using chem. chaperones)

IT Type I collagen
 RL: ADV (Adverse effect, including toxicity); BPR (Biological process);
 PRP (Properties); BIOL (Biological study); PROC (Process)
 (procollagen, pro-.alpha., mutant; correction of genetic defects using
 chem. chaperones)

IT Genetic diseases
 (protein conformation defects from; correction of genetic defects using
 chem. chaperones)

IT Animal cell line
 (.DELTA.F508; correction of genetic defects using chem. chaperones)

IT 9067-96-3, .alpha.-Ketoacid dehydrogenase
 RL: ADV (Adverse effect, including toxicity); BPR (Biological process);
 PRP (Properties); BIOL (Biological study); PROC (Process)
 (correction of genetic defects using chem. chaperones)

IT 56-12-2, Gaba, biological studies 56-40-6, Glycine, biological studies
 56-41-7, Alanine, biological studies 56-81-5, Glycerol, biological
 studies 56-86-0, Glutamic acid, biological studies 67-68-5, Dms0,
 biological studies 87-89-8, Inositol **99-20-7D**,
Trehalose, isofluoroside 107-35-7, Taurine 107-43-7, Betaine
 107-97-1, Sarcosine 147-85-3, Proline, biological studies 149-32-6,
 Erythritol 1184-78-7, Trimethylamine N-oxide 7789-20-0, Water-d2
 25322-68-3, Polyethylene glycol 34522-32-2, Octopine
 RL: BAC (Biological activity or effector, except adverse); **THU**
(Therapeutic use); BIOL (Biological study); USES (Uses)
 (correction of genetic defects using chem. chaperones)

IT 302-95-4, Sodium deoxycholate 9002-93-1, Triton x-100
 RL: NUU (Nonbiological use, unclassified); USES (Uses)
 (correction of genetic defects using chem. chaperones)

IT 9027-52-5 9041-92-3, .alpha.1 Antitrypsin **9054-89-1**,
Superoxide dismutase
 RL: ADV (Adverse effect, including toxicity); BPR (Biological process);
 PRP (Properties); BIOL (Biological study); PROC (Process)
 (mutant; correction of genetic defects using chem. chaperones)

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 L78 3 S L76 AND ANTIOXID?
 L79 0 S L76 AND ANTI OXID?
 L80 1 S L78 AND VEGETABLE

L81 5 S L76 AND VEGETABLE#
 L82 305 S L76 AND PLANT
 L83 1 S L77,L78 AND L80-L82
 L84 2 S L61 AND L76
 L85 2 S L83,L84
 L86 4 S L81 NOT L85
 L87 2 S L86 NOT POLYESTERS/TI
 L88 4 S L85,L87
 E AGA H/AU
 L89 5 S E3-E5
 E SHIBUYA T/AU
 L90 637 S E3-E5,E8
 E FUKUDA S/AU
 L91 532 S E3-E8,E23
 E MIYAKE T/AU
 L92 528 S E3
 E MIYAKE TOSHIO/AU
 L93 2 S E3
 L94 6 S L76 AND L89-L93
 L95 8 S L88,L94

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L95 ANSWER 1 OF 8 BIOSIS COPYRIGHT 1999 BIOSIS
 AN 1998:390785 BIOSIS
 DN PREV199800390785
 TI Trehalose content in foods.
 AU Oku, Kazuyuki; Sawatani, Ikuo; Chaen, Hiroto; Fukuda, Shigeharu;
 Kurimoto, Masashi
 CS Amase Inst., Hayashibara Biochem. Lab. Inc., 7-7 Amase-minamimachi,
 Okayama 700-0834 Japan
 SO Nippon Shokuhin Kagaku Kogaku Kaishi, (1998) Vol. 45, No. 6, pp. 381-384.
 ISSN: 1341-027X.
 DT Article
 LA Japanese
 SL Japanese; English
 AB The trehalose content in natural and fermented foods was analyzed by gas
 chromatography (GC). The samples were prepared by extraction from each
 food with 80% ethanol aqueous solution. For the GC analysis of sugar, an
 OV-17 packed column and a DB-5 capillary column were used. Trehalose was
 detected in relatively large quantity in mushrooms and baker's yeast. The
 trehalose content of dry solid materials ranged from 10% to 23% for
 mushrooms and from 7% to 11% for baker's yeast. Trehalose was also
 detected in alcoholic beverages (sake, beer and wine), mirin, bean
 products, shrimp, mozuku and hijiki. The trehalose content of each was
 39-240 ppm, 260 ppm, 5-150 ppm, 5-5000 ppm, 4 ppm and 2700 ppm,
 respectively. Wakame, konbu and honey have also been reported to contain
 trehalose, however, it was not detected in those materials in this study.
 CC Food Technology - General; Methods *13502
 Biochemical Studies - General *10060
 IT Major Concepts
 Foods
 IT Chemicals & Biochemicals
 trehalose: food constituent
 IT Miscellaneous Descriptors
 baker's yeast; bean products: vegetable product; beer:

alcoholic beverage; hijiki: ethnic food; mirin: ethnic food; mozuku:
ethnic food; mushrooms: food; sake: alcoholic beverage; shrimp:
seafood; wine: alcoholic beverage

RN 99-20-7 (TREHALOSE)

L95 ANSWER 2 OF 8 BIOSIS COPYRIGHT 1999 BIOSIS

AN 1998:255288 BIOSIS

DN PREV199800255288

TI Stabilization by trehalose of superoxide dismutase-like activity of
various **vegetables**.

AU Aga, Hajime; Shibuya, Takashi; Chaen, Hiroto;

Fukuda, Shigeharu; Kurimoto, Masashi

CS Amase Inst., Hayashibara Biochem. Lab. Inc., 7-7 Amase-minami, Okayama-shi
700-0834 Japan

SO Nippon Shokuhin Kagaku Kogaku Kaishi, (1998) Vol. 45, No. 3, pp. 210-215.
ISSN: 1341-027X.

DT Article

LA Japanese

SL Japanese; English

AB The effect of trehalose on the superoxide dismutase (SOD)-like activity of
various **vegetables** was investigated. Six hundred grams of minced
carrot and 66 g of trehalose were mixed and dried in vacuo at 40degree C
for 40 h. The drying matter was powdered and then preserved at 40degree C
for 7 d. The remaining SOD-like activity of the powder was higher than
that of the carrot powder alone. Trehalose was the most effective in
stabilizing SOD-like activity among various saccharides tested, such as
glucose, sorbitol, mannitol, maltose and sucrose. The same effect was
observed with other **vegetable** powders. Trehalose seems to
stabilize both SOD and **antioxidants** in **vegetables**.

CC Enzymes - Chemical and Physical *10806

Biochemical Methods - Proteins, Peptides and Amino Acids *10054

Biochemical Studies - Proteins, Peptides and Amino Acids *10064

Enzymes - Physiological Studies *10808

Plant Physiology, Biochemistry and Biophysics - Enzymes *51518

Biophysics - General Biophysical Techniques *10504

BC Angiospermae 25200

Umbelliferae 26915

IT Major Concepts

Enzymology (Biochemistry and Molecular Biophysics)

IT Chemicals & Biochemicals

superoxide dismutase: trehalose stabilization; trehalose

ORGN Super Taxa

Angiospermae: Spermatophyta, Plantae; Umbelliferae: Dicotyledones,

Angiospermae, Spermatophyta, Plantae

ORGN Organism Name

carrot (Umbelliferae); **vegetable** (Angiospermae)

ORGN Organism Superterms

Angiosperms; Dicots; **Plants**; Spermatophytes; Vascular

Plants

RN 99-20-7 (TREHALOSE)

9054-89-1 (SUPEROXIDE DISMUTASE)

L95 ANSWER 3 OF 8 BIOSIS COPYRIGHT 1999 BIOSIS

AN 1998:243698 BIOSIS

DN PREV199800243698

TI Superoxide dismutase activity in cultured corneal endothelial cells stored
with trehalose: Superoxide dismutase activity in corneal endothelial
cells.

AU Watanabe, M.; Takano, T.; Kanai, A.

CS Juntendo Univ. Sch. Med., Tokyo Japan
 SO IOVS, (March 15, 1998) Vol. 39, No. 4, pp. S1020.
 Meeting Info.: Annual Meeting of the Association for Research in Vision
 and Ophthalmology Fort Lauderdale, Florida, USA May 10-15, 1998
 Association for Research in Vision and Ophthalmology
 .
 DT Conference
 LA English
 CC Cytology and Cytochemistry - Animal *02506
 Biochemical Studies - Proteins, Peptides and Amino Acids *10064
 Biochemical Studies - Carbohydrates *10068
 Enzymes - Physiological Studies *10808
 Sense Organs, Associated Structures and Functions - Physiology and
 Biochemistry *20004
 Tissue Culture, Apparatus, Methods and Media *32500
 General Biology - Symposia, Transactions and Proceedings of Conferences,
 Congresses, Review Annuals *00520
 BC Leporidae 86040
 IT Major Concepts
 Cell Biology; Enzymology (Biochemistry and Molecular Biophysics); Sense
 Organs (Sensory Reception)
 IT Parts, Structures, & Systems of Organisms
 corneal endothelial cell: sensory system, storage
 IT Chemicals & Biochemicals
 superoxide dismutase; trehalose: corneal storage medium component
 IT Miscellaneous Descriptors
 Meeting Abstract; Meeting Poster
 ORGN Super Taxa
 Leporidae: Lagomorpha, Mammalia, Vertebrata, Chordata, Animalia
 ORGN Organism Name
 rabbit (Leporidae)
 ORGN Organism Superterms
 Animals; Chordates; Lagomorphs; Mammals; Nonhuman Mammals; Nonhuman
 Vertebrates; Vertebrates
 RN 9054-89-1 (SUPEROXIDE DISMUTASE)
 99-20-7 (TREHALOSE)
 L95 ANSWER 4 OF 8 BIOSIS COPYRIGHT 1999 BIOSIS
 AN 1997:353364 BIOSIS
 DN PREV199799652567
 TI Action of a thermostable trehalose synthase from *Thermus aquaticus* on
 sucrose.
 AU Nishimoto, Tomoyuki (1); Nakada, Tetsuya; Chaen, Hiroto; Fukuda,
 Shigeharu; Sugimoto, Toshiyuki; Kurimoto, Masashi; Tsujisaka, Yoshio
 CS (1) Hayashibara Biochem. Lab. Inc., 7-7 Amase-minamimachi, Okayama 700
 Japan
 SO Bioscience Biotechnology and Biochemistry, (1997) Vol. 61, No. 5, pp.
 898-899.
 ISSN: 0916-8451.
 DT Article
 LA English
 AB A thermostable trehalose synthase from *Thermus aquaticus* ATCC 33923, which
 catalyzes the interconversion between maltose and trehalose by
 intramolecular transglucosylation, converted sucrose into trehalulose
 (1-0-alpha-D-glucopyranosyl-D-fructose). The trehalulose-forming activity
 of the enzyme was very low compared with that of maltose and trehalose.
 Kinetic studies showed that sucrose competitively inhibited the
 interconversion activity between maltose and trehalose. Consequently,
 these three substrates, maltose, trehalose, and sucrose, are thought to

bind the same active site of trehalose synthase.

CC Biochemical Studies - Proteins, Peptides and Amino Acids *10064
 Biochemical Studies - Carbohydrates *10068
 Enzymes - Physiological Studies *10808
 Virology - Bacteriophage *33504

BC Gram-Negative Aerobic Rods and Cocci *06500

IT Major Concepts
 Biochemistry and Molecular Biophysics; Enzymology (Biochemistry and
 Molecular Biophysics); Microbiology

IT Chemicals & Biochemicals
 TREHALOSE SYNTHASE; SUCROSE; TREHALOSE; MALTOSE; TREHALULOSE

IT Miscellaneous Descriptors
 ACTIVE SITE; ATCC 33923; ENZYMATIC SYNTHESIS; ENZYME SUBSTRATE;
 ENZYMOLOGY; MALTOSE; SUCROSE; THERMOSTABILITY; TREHALOSE;
 TREHALOSE
 SYNTHASE; TREHALULOSE

ORGN Super Taxa
 Gram-Negative Aerobic Rods and Cocci: Eubacteria, Bacteria

ORGN Organism Name
 gram-negative aerobic rods and cocci (Gram-Negative Aerobic Rods and
 Cocci); Thermus aquaticus (Gram-Negative Aerobic Rods and Cocci)

ORGN Organism Superterms
 bacteria; eubacteria; microorganisms

RN 126341-88-6 (TREHALOSE SYNTHASE)
 57-50-1 (SUCROSE)
 99-20-7 (TREHALOSE)
 69-79-4 (MALTOSE)
 51411-23-5 (TREHALULOSE)

L95 ANSWER 5 OF 8 BIOSIS COPYRIGHT 1999 BIOSIS

AN 1997:130752 BIOSIS

DN PREV199799422565

TI Production of trehalose from starch by thermostable enzymes from
 Sulfolobus acidocaldarius.

AU Mukai, Kazuhisa (1); Tabuchi, Akihiko; Nakada, Tetsuya; Shibuya,
 Takashi; Chaen, Hiroto; Fukuda, Shigeharu; Kurimoto,
 Masashi; Tsujisaka, Yoshio

CS (1) Hayashibara Biochem. Lab. Inc., 7-7 Amase-minami machi, Okayama 700
 Japan

SO Starch, (1997) Vol. 49, No. 1, pp. 26-30.
 ISSN: 0038-9056.

DT Article

LA English

SL English; German

AB The optimum conditions for the production of trehalose from starch were
 investigated using two thermostable enzymes, maltooligosyl trehalose
 synthase (MTSase) and maltooligosyl trehalose trehalohydrolase (MTHase),
 from Sulfolobus acidocaldarius ATCC 33909. The optimum pH was 5.5 and the
 optimum temperature was 55-57 degree C using isoamylase from Pseudomonas
 amyloclavata as a debranching enzyme. The addition of CGTase to the
 reaction mixture during the saccharification process caused an increase in
 trehalose and a decrease in maltose and maltotriose. Isoamylase was better
 than pullulanase as a debranching enzyme. The yield of trehalose was
 independent of the type of starch used. Under optimum conditions, the
 yield of trehalose from corn starch at 30% concentration was more than
 82%.

CC Biochemical Studies - General *10060
 Enzymes - General and Comparative Studies; Coenzymes *10802
 Food Technology - General; Methods *13502

Food Technology - Preparation, Processing and Storage *13532
 Physiology and Biochemistry of Bacteria *31000
 BC Pseudomonadaceae 06508
 Sulfolobaceae *09931
 IT Major Concepts
 Biochemistry and Molecular Biophysics; Enzymology (Biochemistry and
 Molecular Biophysics); Foods; Physiology
 IT Chemicals & Biochemicals
 TREHALOSE; MALTOOLIGOSYL TREHALOSE TREHALOHYDROLASE;
 MALTOOLIGOSYL
 TREHALOSE SYNTHASE; ISOAMYLASE; PULLULANASE
 IT Industry
 food industry
 IT Miscellaneous Descriptors
 BIOBUSINESS; BIOPROCESS ENGINEERING; DEBRANCHING ENZYME;
 ENZYMOLOGY;
 FOODS; ISOAMYLASE; MALTOOLIGOSYL TREHALOSE SYNTHASE;
 MALTOOLIGOSYL
 TREHALOSE TREHALOHYDROLASE; MTHASE; MTSASE; PRODUCTION;
 PULLULANASE;
 THERMOSTABLE ENZYME; TREHALOSE
 ORGN Super Taxa
 Bacteria - General Unspecified: Eubacteria, Bacteria; Pseudomonadaceae:
 Eubacteria, Bacteria; Sulfolobaceae: Archaeobacteria, Bacteria
 ORGN Organism Name
 bacteria (Bacteria - General Unspecified); microorganism
 (Microorganisms - Unspecified); Pseudomonas amyloclavata
 (Pseudomonadaceae); Sulfolobus acidocaldarius (Sulfolobaceae)
 ORGN Organism Superterms
 archaeobacteria; bacteria; eubacteria; microorganisms
 RN 99-20-7 (TREHALOSE)
 170780-50-4 (MALTOOLIGOSYL TREHALOSE TREHALOHYDROLASE)
 170780-49-1 (MALTOOLIGOSYL TREHALOSE SYNTHASE)
 9067-73-6 (ISOAMYLASE)
 9075-68-7 (PULLULANASE)
 L95 ANSWER 6 OF 8 BIOSIS COPYRIGHT 1999 BIOSIS
 AN 1997:42501 BIOSIS
 DN PREV199799334489
 TI Cloning and sequencing of a cluster of genes encoding novel enzymes of
 trehalose biosynthesis from thermophilic archaeobacterium Sulfolobus
 acidocaldarius.
 AU Maruta, Kazuhiko (1); Mitsuzumi, Hitoshi; Nakada, Tetsuya; Kubota, Michio;
 Chaen, Hiroto; Fukuda, Shigeharu; Sugimoto, Toshiyuki; Kurimoto,
 Masashi
 CS (1) Hayashibara Biochem. Lab. Inc., 7-7 Amase-minami machi, Okayama 700
 Japan
 SO Biochimica et Biophysica Acta, (1996) Vol. 1291, No. 3, pp. 177-181.
 ISSN: 0006-3002.
 DT Article
 LA English
 AB Trehalose biosynthesis genes, treZ, treX and treY, encoding
 maltooligosyltrehalose trehalohydrolase (TreZ), glycogen debranching
 enzyme (TreX), and maltooligosyltrehalose synthase (TreY) have been cloned
 from the thermophilic archaeobacterium Sulfolobus acidocaldarius ATCC33909.
 The amino-acid sequences deduced from treZ, treX and treY are composed of
 556, 713 and 720 amino-acid residues, respectively. TreZ and TreY are
 33-40% homologous to the corresponding enzymes from Arthrobacter sp. Q36.
 We have proposed that the biosynthesis of trehalose in Sulfolobus occurs

via the actions of the three enzymes encoded by treZXY.

CC Biochemical Studies - Nucleic Acids, Purines and Pyrimidines *10062
 Biochemical Studies - Proteins, Peptides and Amino Acids *10064
 Biophysics - Molecular Properties and Macromolecules *10506
 Enzymes - Chemical and Physical *10806
 Physiology and Biochemistry of Bacteria *31000
 Genetics of Bacteria and Viruses *31500

BC Sulfolobaceae *09931

IT Major Concepts
 Biochemistry and Molecular Biophysics; Enzymology (Biochemistry and
 Molecular Biophysics); Genetics; Physiology

IT Chemicals & Biochemicals
 TREHALOSE; GLYCOGEN; MALTOOLIGOSYLTREHALOSE SYNTHASE;
 MALTOOLIGOSYLTREHALOSE TREHALOHYDROLASE

IT Sequence Data
 amino acid sequence; molecular sequence data; nucleotide sequence

IT Miscellaneous Descriptors
 ENZYMOLOGY; GENE CLONING; GLYCOGEN DEBRANCHING ENZYME;
 MALTOOLIGOSYLTREHALOSE; MALTOOLIGOSYLTREHALOSE SYNTHASE;
 MALTOOLIGOSYLTREHALOSE TREHALOHYDROLASE; MOLECULAR
 GENETICS; TREHALOSE

ORGN Super Taxa
 Sulfolobaceae: Archaeobacteria, Bacteria

ORGN Organism Name
 Sulfolobus acidocaldarius (Sulfolobaceae)

ORGN Organism Superterms
 archaeobacteria; bacteria; microorganisms

RN 99-20-7 (TREHALOSE)
 9005-79-2 (GLYCOGEN)
 170780-49-1 (MALTOOLIGOSYLTREHALOSE SYNTHASE)
 170780-50-4 (MALTOOLIGOSYLTREHALOSE TREHALOHYDROLASE)

L95 ANSWER 7 OF 8 BIOSIS COPYRIGHT 1999 BIOSIS

AN 1996:106398 BIOSIS

DN PREV199698678533

TI Existence of a novel enzyme converting maltose into trehalose.

AU Nishimoto, Tomoyuki (1); Nakano, Masayuki; Ikegami, Shoji; Chaen, Hiroto;
 Fukuda, Shigeharu; Sugimoto, Toshiyuki; Kurimoto, Masashi;
 Tsujisaka, Yoshio

CS (1) Hayashibara Biochem. Lab. Inc., 7-7 Amase-minami-machi, Okayama 700
 Japan

SO Bioscience Biotechnology and Biochemistry, (1995) Vol. 59, No. 11, pp.
 2189-2190.
 ISSN: 0916-8451.

DT Article

LA English

AB A bacterium, Pimelobacter sp. R48, isolated from soil, showed the ability
 to produce trehalose from maltose. The partially purified enzyme from a
 cell-free extract catalyzed the conversion of maltose into trehalose
 without requiring phosphate. The enzyme was considered to be a new
 intramolecular glucosyltransferase. The enzyme was also tentatively found
 to exist in Pseudomonas putida H262 isolated from soil and in some Thermus
 strains.

CC Comparative Biochemistry, General *10010
 Biochemical Methods - Proteins, Peptides and Amino Acids *10054
 Biochemical Methods - Carbohydrates *10058
 Biochemical Studies - Proteins, Peptides and Amino Acids *10064
 Biochemical Studies - Carbohydrates *10068
 Biochemical Studies - Minerals *10069

Biophysics - General Biophysical Techniques *10504
Biophysics - Molecular Properties and Macromolecules *10506
Enzymes - General and Comparative Studies; Coenzymes *10802
Enzymes - Methods *10804
Enzymes - Chemical and Physical *10806
Enzymes - Physiological Studies *10808
Metabolism - General Metabolism; Metabolic Pathways *13002
Metabolism - Carbohydrates *13004
Metabolism - Proteins, Peptides and Amino Acids *13012
Nutrition - General Studies, Nutritional Status and Methods *13202
Physiology and Biochemistry of Bacteria *31000
Microbiological Apparatus, Methods and Media *32000
Food and Industrial Microbiology - Biosynthesis, Bioassay and Fermentation *39007
Soil Microbiology *40000
BC Gram-Negative Aerobic Rods and Cocci 06500
Pseudomonadaceae 06508
Nocardiodaceae *08811
IT Major Concepts
Biochemistry and Molecular Biophysics; Bioprocess Engineering;
Enzymology (Biochemistry and Molecular Biophysics); Metabolism; Methods
and Techniques; Microbiology; Nutrition; Physiology
IT Chemicals & Biochemicals
MALTOSE; TREHALOSE; GLUCOSYLTRANSFERASE
IT Miscellaneous Descriptors
BACTERIAL ENZYMES; BIOTECHNOLOGY; INTRAMOLECULAR
GLUCOSYLTRANSFERASE;
SOIL ISOLATES; SYNTHETIC METHOD
ORGN Super Taxa
Gram-Negative Aerobic Rods and Cocci: Eubacteria, Bacteria;
Nocardiodaceae: Eubacteria, Bacteria; Pseudomonadaceae: Eubacteria,
Bacteria
ORGN Organism Name
gram-negative aerobic rods and cocci (Gram-Negative Aerobic Rods and
Cocci); Pimelobacter sp. (Nocardiodaceae); Pseudomonas putida
(Pseudomonadaceae); Thermus (Gram-Negative Aerobic Rods and Cocci)
ORGN Organism Superterms
bacteria; eubacteria; microorganisms
RN 69-79-4 (MALTOSE)
99-20-7 (TREHALOSE)
9031-48-5 (GLUCOSYLTRANSFERASE)

L95 ANSWER 8 OF 8 BIOSIS COPYRIGHT 1999 BIOSIS
AN 1993:431927 BIOSIS
DN PREV199396086552
TI The use of trehalose-stabilized lyophilized methanol dehydrogenase from
Hyphomicrobium X for the detection of methanol.
AU Argall, Mary E.; Smith, Geoffrey D.
CS Div. Biochem. Molecular Biol., Sch. Life Sci., Fac. Sci., Australian
National Univ., Canberra, ACT 0200 Australia
SO Biochemistry and Molecular Biology International, (1993) Vol. 30, No. 3,
pp. 491-497.
ISSN: 1039-9712.
DT Article
LA English
AB The enzyme methanol dehydrogenase (EC 1.1.99.8) from Hyphomicrobium X was
used in an attempt to develop a rapid colorimetric test for methanol. The
enzyme was stabilized for storage by lyophilization in the presence of the
disaccharide trehalose. It was found that the enzyme retained

significantly greater activity in the dried state with trehalose than without. The enzyme was partially purified by ammonium sulphate fractionation, after which it was found to be more stable in solution at pH 9 than at pH 7. A procedure is given which involves mixing a defined amount of enzyme with the methanol-containing water together with phenazine methosulphate (PMS), 2-6-dichlorophenol-indophenol (DCPIP) and cyanide, and observing the resultant colour change from blue to yellow if methanol is present. The sensitivity of the procedure is such that 9 mg L-1 of methanol can be readily detected.

CC Biochemical Methods - General *10050
 Biochemical Studies - General *10060
 Biophysics - General Biophysical Techniques *10504
 Biophysics - Molecular Properties and Macromolecules *10506
 Enzymes - Methods *10804
 Enzymes - Physiological Studies *10808
 Physiology and Biochemistry of Bacteria *31000
 Food and Industrial Microbiology - General and Miscellaneous *39008
 BC Prosthecate Bacteria *08310
 IT Major Concepts
 Biochemistry and Molecular Biophysics; Bioprocess Engineering;
 Enzymology (Biochemistry and Molecular Biophysics); Methods and
 Techniques; Physiology
 IT Chemicals & Biochemicals
 TREHALOSE; METHANOL DEHYDROGENASE; METHANOL; EC 1.1.99.8
 IT Industry
 crop industry; food industry
 IT Miscellaneous Descriptors
 CROP MANAGEMENT; ECONOMICS; HARVESTING; SHELF LIFE;
 VEGETABLE
 STORAGE TEMPERATURE
 ORGN Super Taxa
 Ascomycetes: Fungi, Plantae; Fungi - Unspecified: Fungi, Plantae; Fungi
 Imperfecti or Deuteromycetes: Fungi, Plantae; Plantae - Unspecified:
 Plantae; Prosthecate Bacteria: Eubacteria, Bacteria
 ORGN Organism Name
 fungus (Fungi - Unspecified); plant (Plantae - Unspecified);
 Colletotrichum coccodes (Ascomycetes); Helminthosporium solani (Fungi
 Imperfecti or Deuteromycetes); Prosthecate bacteria (Prosthecate
 Bacteria)
 ORGN Organism Superterms
 bacteria; eubacteria; fungi; microorganisms; nonvascular plants; plants
 RN 99-20-7 (TREHALOSE)
 37205-43-9Q (METHANOL DEHYDROGENASE)
 74506-37-9Q (METHANOL DEHYDROGENASE)
 67-56-1 (METHANOL)
 37205-43-9 (EC 1.1.99.8)

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FILE 'FSTA' ENTERED AT 13:22:32 ON 08 FEB 1999

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L96      386 S E3,E5,E6
          E TREHALOSE/CT
          E E3+ALL/CT
L97      119 S E8
L98      386 S L96,L97
L99      3 S L98 AND ANTIOXID?
          E VEGETABLE/CT
L100     37 S E22+NT/CT AND L98
L101     3 S E15+NT/CT AND L98
L102     0 S E5,E6 AND L98
L103     0 S E27 AND L98
L104     1 S E28,E29 AND L98
L105     36 S E31+NT/CT AND L98
L106     40 S L100,L101,L104,L105
L107     2 S L106 AND STABIL?
L108     1 S L106 AND STABL?
L109     5 S L99,L107,L108
L110     4 S L109 NOT MUSHROOM
L111     1 S L106 AND DISMUTASE
L112     4 S L110,L111
L113     11 S L98 AND OXYGEN
L114     0 S L113 AND L106
          E J/CC
L115     34 S E3,E4 AND L98
L116     32 S L115 NOT L99,L107-L114
L117     1 S PAPAIN AND L116
L118     19 S L98 AND (AGA H? OR SHIBUYA T? OR FUKUDA S? OR MIYAKE T?)/AU
L119     5 S L112,L117
L120     18 S L118 NOT L119
L121     2 S L120 AND (DESICCANT OR SUPPLEMENTING)/TI
L122     7 S L119,L121

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L122 ANSWER 1 OF 7  FSTA  COPYRIGHT 1999 IFIS
AN  1998(10):J2360  FSTA   FS  FSTA
TI  Stabilization by trehalose of superoxide
    dismutase-like activity of various vegetables.
AU  Aga, H.; Shibuya, T.; Chaen, H.; Fukuda, S.; Kurimoto, M.
CS  Amase Inst., Hayashibara Biochemical Laboratories Inc., 7-7, Amase-minami,
    Okayama-shi 700-0834, Japan
SO  Journal of Japanese Society for Food Science and Technology (Nippon
    Shokuhin Kagaku Kogaku Kaishi), (1998) 45 (3) 210-215, 11 ref.
    ISSN: 1341-027X.
DT  Journal
LA  Japanese      SL  English
AB  Effects of trehalose on the superoxide dismutase
    (SOD)-like activity of various vegetable powders (aubergine, cucumber,
    cabbage, spinach, pumpkin, carrot, radish and onion) were investigated.
    600 g of minced carrot and 66 g of trehalose were mixed and
    dried in vacuo at 40.degree. C for 40 h. Drying matter was powdered and
    then preserved at 40.degree. C for 7 days. SOD-like activity of the

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carrot and **trehalose** powder was higher than that of carrot powder alone. Among a range saccharides tested (glucose, sorbitol, mannitol, maltose, **trehalose** and sucrose), **trehalose** was the most effective at **stabilizing** SOD-like activity. The same effect was observed with the other vegetable powders. It seems likely that **trehalose stabilizes** SOD and other **antioxidants** in vegetables. [From En summ. & tables.]

CC J (Fruits, Vegetables and Nuts)

CT DRIED FOODS; ENZYMES; INSTANT FOODS; OXIDOREDUCTASES; SUGARS; **VEGETABLES**; ENZYMIC ACTIVITY; POWDERS; SACCHARIDES; **SUPEROXIDE DISMUTASES; TREHALOSE**

L122 ANSWER 2 OF 7 FSTA COPYRIGHT 1999 IFIS

AN 1998(09):B1111 FSTA FS FSTA

TI Stabilization of papain from papaya peels.

AU Espin, N.; Islam, M. N.

CS Delaware Agric. Exp. Sta., Dep. of Animal & Food Sci., Coll. of Agric. Sci., Univ. of Delaware, Newark, DE 19717-1303, USA

SO Food Science and Technology International/Ciencia y Tecnologia de Alimentos Internacional, (1998) 4 (3) 179-187, 30 ref. ISSN: 1082-0132.

DT Journal

LA English SL Spanish

AB Crude papain in papaya peel was stabilized before drying by the addition of various [**antioxidants** and other] chemicals (ascorbic acid, sodium ascorbate, erythorbic acid, sodium erythorbate, sodium metabisulphite, sodium tetrathionate, 4-hexylresorcinol, TBHQ, rutin, .alpha.-tocopherol, **trehalose** and sucrose). Chemicals were added to the ground papaya peel at 0, 0.12, 0.25, 0.5, 0.75, 1, 1.25 and 1.5% (w/w). Drying temp. were 40, 55 and 60.degree. C. Enzyme activity was measured before and after drying by the casein digestion method. Percentage of enzyme activity retained (% EAR) was calculated by assigning a value of 100% EAR to fresh peels. Possible synergism between chemicals was also studied for a 1:1 ratio chemical/chemical at 1% total concn. The highest % EAR was obtained at 55.degree. C for all chemicals, except for sucrose and **trehalose**, which showed their best effect at 40.degree. C. TBHQ, rutin, .alpha.-tocopherol and 4-hexylresorcinol showed a destabilizing effect. Max. protective effect occurred at 1% concn. At this concn., sodium tetrathionate showed the best protective effect (90% EAR) followed by sodium metabisulphite (85% EAR), while enzymes treated with both sodium ascorbate and sodium erythorbate retained 75% of the original activity. Ascorbic acid and erythorbic acid were 10% less effective than their corresponding sodium salts, possibly due to lower pH. **Trehalose** showed only 57% EAR, while sucrose failed to produce any appreciable effect. No synergistic effect was shown by any combination of chemicals.

CC B (Biotechnology)

CT **ANTIOXIDANTS**; ENZYMES; PAPAYAS; PROTEINASES; STABILITY; ENZYMIC ACTIVITY; PAPAIN; STABILIZATION

L122 ANSWER 3 OF 7 FSTA COPYRIGHT 1999 IFIS

AN 97(04):C0083 FSTA FS FSTA

TI **Stabilization** of dry immobilized acetylcholinesterase on microtitration plates for colorimetric determination of its inhibitors in water and biological fluids.

AU Nguyen, V. K.; Ehret-Sabatier, L.; Goeldner, M.; Boudier, C.; Jamet, G.; Warter, J. M.; Poindron, P.

CS Dep. d'Immunologie, Immunopharmacologie et Path., Univ. Louis Pasteur, 74

- Route du Rhin, BP 24, 67401 Illkirch Cedex, France
- SO Enzyme and Microbial Technology, (1996) 20 (1) 18-23, 19 ref.
ISSN: 0141-0229.
- DT Journal
- LA English
- AB The use of gelatin-**trehalose** or bovine serum albumin (BSA)-**trehalose** films for improving the **stability** of dry immobilized enzymes is described. The method was developed using acetylcholinesterase (AChE; EC 3.1.1.7), and the immobilized AChE preparations were subsequently tested for suitability in measuring pesticide and drug residues in water, lettuce and serum samples. The enzyme preparation was immobilized onto polystyrene microtitration plates as a solid support and covered with gelatin-**trehalose** or BSA-**trehalose** film. Immobilized AChE without a protective film lost all activity within 1 day, whereas full enzyme activity was maintained for at least 31 days at 40.degree. C and room temp. for gelatin-**trehalose** film-protected immobilized enzyme. Temp. and pH **stability** of film-protected AChE was also improved. The utility of these **stabilized** immobilized enzymes for determination of pesticide residues in water and lettuce samples was tested. Detection limits for pesticides in water and lettuce samples, were 0.5, 10, 10, 1 and 0.1 .mu.g/l for naled, dichlorvos, carbaryl, aldicarb and carbofuran, respectively. No interferences, were noted for analysis of pesticides in lettuce samples. The immobilized enzyme was also able to determine drug and pesticide residues in human serum samples. The advantages of this enzyme immobilization technique, and suitability of the protected immobilized AChE for determination of pesticides and drugs in agricultural and clinical samples are discussed. (KAR)
- CC C (Hygiene and Toxicology)
- CT Food safety plant foods; Food safety beverages; Esterases; Immobilized enzymes; Pesticides; **Lettuces**; Water; RESIDUES; CHOLINESTERASES; Enzymes; **Vegetables specific**; Food safety
- L122 ANSWER 4 OF 7 FSTA COPYRIGHT 1999 IFIS
- AN 96(11):J0272 FSTA FS FSTA
- TI Stabilization of **papain** from papaya peels.
- AU Espin, N. F.; Islam, M. N.
- CS United States of America, Institute of Food Technologists [1996 Annual Meeting]; Dep. of Animal & Food Sci., Univ. of Delaware, Newark, DE 19716, USA
- SO (1996) 1996 IFT annual meeting: book of abstracts, p. 15 ISSN 1082-1236.
- DT Miscellaneous (Abstract of presentation)
- LA English
- AB Stabilization of **papain** extracted from papaya peels by addition of various agents (ascorbic acid, sodium ascorbate, erythorbic acid, sodium erythorbate, sodium metabisulphite, sodium tetrathionate, 4-hexylresorcinol, **trehalose** and sucrose, all at 0-1.5%) was examined at peel drying temp. of 40, 55 and 60.degree. C. Max. enzyme activity was retained in peels dried at 55.degree. C for all agents except sugars (with sugars, 40.degree. C proved optimal). For all agents except hexylresorcinol, which proved inhibitory, enzyme retention level increased with concn. of agent added, up to about 1%. At 1%, sodium tetrathionate showed best protective effect (90% enzyme retained), followed by metabisulphite and then ascorbate/erythorbate. Sugars, particularly sucrose, were poor protectants. [From En summ. Further abstracts of papers/posters presented at this meeting are covered in electronic formats of the FSTA database and may be traced via the corporate authors (CA) field, under United States of America, Institute of Food Technologists [1996 Annual Meeting]. See also FSTA (1996) 28 11A2.] (LJW)

CC **J (Fruits, Vegetables and Nuts)**

CT Papayas; Proteinases; Stability; **PAPAIN**; Fruits specific;
Enzymes; Physical properties

L122 ANSWER 5 OF 7 FSTA COPYRIGHT 1999 IFIS

AN 95(03):T0022 FSTA FS FSTA

TI Preservatives world-wide market review. Biopreservatives come of age.

AU Stroh, W. H.

CS Bioconsult, Germany

SO International Food Ingredients, (1994) No. 6, 45-47.
ISSN: 0924-5863.

DT Journal

LA English

AB The world market for preservatives is discussed, with particular emphasis on naturally-derived types (biopreservatives). The international market for preservatives amounted to approx. \$1.5 billion in 1992. Of these, biopreservatives were not very well established for use in foods. However, with the resurgence of interest in more natural foods and consumer desire for reduced use of artificial preservatives, it is expected that potential exists for extension of the use of biopreservatives. Aspects considered include: world market for preservatives; biopreservatives (**trehalose**, plant extracts); commercial production; limitations on the use of food preservatives and **antioxidants**; and emerging markets. (HAS)

CC T (Additives, Spices and Condiments)

CT Markets; Preservatives; WORLD; Additives; Economics

L122 ANSWER 6 OF 7 FSTA COPYRIGHT 1999 IFIS

AN 95(03):L0035 FSTA FS FSTA

TI Energy-supplementing saccharide source and its uses.

AU **Shibuya, T.**; Sugimoto, T.; **Miyake, T.**

CS KK Hayashibara Seibutsu Kagaku Kenkyujo

SO European Patent Application

PI EP 619951 A2 1994

PRAI JP 93-93513 16 Mar. 1993 (Hayashibara Seibutsu Kagaku Kenkyujo, 2-3, 1-chome, Shimoishii, Okayama-shi, Okayama, Japan)

DT Patent (Patent)

LA English

AB **Trehalose** for use as a side effect-free energy supplement is prepared by allowing a nonreducing saccharide-forming enzyme to act upon a partial starch hydrolysate exhibiting reducing power. [From En summ.] (LJW)

CC L (Sugars, Syrups and Starches)

CT Patents; Sugars nonreducing; **TREHALOSE**; Sugars

L122 ANSWER 7 OF 7 FSTA COPYRIGHT 1999 IFIS

AN 94(09):G0028 FSTA FS FSTA

TI **Desiccant**, dehydration therewith, and dehydrated product obtainable thereby.

AU Mandai, T.; **Shibuya, T.**; Sugimoto, T.; **Miyake, T.**

CS KK Hayashibara Seibutsu Kagaku Kenkyujo

SO European Patent Application

PI EP 600730 A1 1994

PRAI JP 92-356600 2 Dec. 1992 (Hayashibara Seibutsu Kagaku Kenkyujo, 2-3, 1-chome, Shimoishii, Okayama-shi, Okayama, Japan)

DT Patent (Patent)

LA English

AB A drying process for foods, incorporating a non-reducing anhydrous **trehalose** as desiccant, is described. The dried products obtained

using this drying system are also described. During drying of the food, the anhydrous **trehalose** desiccant is converted to hydrous crystalline **trehalose**. The drying process does not alter final food product quality. [From En summ.] (HAS)

CC G (Catering, Speciality and Multicomponent Foods)
CT Patents; Drying; FOODS; Processing thermal

=> d his 1123-

(FILE 'FSTA' ENTERED AT 13:36:30 ON 08 FEB 1999)

L123 19 S L98 AND PATENT
L124 19 S L98 AND PATENT?
L125 19 S L123,L124
L126 17 S L125 NOT L122

=> d all tot

L126 ANSWER 1 OF 17 FSTA COPYRIGHT 1999 IFIS

AN 1998(10):L0518 FSTA FS FSTA

TI Crystalline powdery saccharide, its preparation and uses.

AU Chaen, H.; Mukai, K.; Miyake, T.

CS KK Hayashibara Seibutsu Kagaku Kenkyujo

SO European Patent Application

PI EP 850947 A1 1998

PRAI JP 96-344511 10 Dec. 1996 (Hayashibara Seibutsu Kagaku Kenkyujo, Okayama, Japan)

DT Patent (Patent)

LA English

AB A stable crystalline saccharide powder with a crystallinity of .gtoreq.40% which has low hygroscopicity and good fluidity and handling properties is described. The saccharide is prepared from an aqueous solution containing **trehalose** and a saccharide which is crystallizable in the presence of **trehalose**. [From En summ.]

CC L (Sugars, Syrups and Starches)

CT CRYSTALLIZATION; DRIED FOODS; INSTANT FOODS; **PATENTS**;
SUGARS;

POWDERS; SACCHARIDES

L126 ANSWER 2 OF 17 FSTA COPYRIGHT 1999 IFIS

AN 97(12):B0158 FSTA FS FSTA

TI Enhanced accumulation of **trehalose** in plants.

AU Goddijn, O. J. M.; Verwoerd, T. C.; Krutwagen, R. W. H.; Voogd, E.

CS Mogen International NV

SO European Patent Application

PI EP 784095 A2 1997

PRAI PY 96-996 12 Jan. 1996 (Mogen International, NL-2333 CB Leiden, Netherlands)

DT Patent (Patent)

LA English

AB A process for producing **trehalose** in plant cells that are capable of producing trehalase is described. Plant cells containing the genes required to produce **trehalose** and trehalase are grown in the presence of a trehalase inhibitor. [From En summ.] (HAS)

CC B (Biotechnology)

CT Cells; Plants; Sugars; **PATENTS**; **TREHALOSE**;
Carbohydrates

L126 ANSWER 3 OF 17 FSTA COPYRIGHT 1999 IFIS

AN 97(08):L0051 FSTA FS FSTA

TI Production of **trehalose** from starch by thermostable enzymes from *Sulfolobus acidocaldarius*.

AU Mukai, K.; Tabuchi, A.; Nakada, T.; Shibuya, T.; Chaen, H.; Fukuda, S.; Kurimoto, M.; Tsujisaka, Y.

CS Hayashibara Biochemical Laboratories Inc., 7-7 Amase-minami machi, Okayama 700, Japan

SO Starch/Staerke, (1997) 49 (1) 26-30, 21 ref.
ISSN: 0038-9056.

DT Journal

LA English SL German

AB The optimum conditions for the production of **trehalose** from starch were investigated using 2 thermostable enzymes, maltooligosyl **trehalose** synthase (MTSase) and maltooligosyl **trehalose** trehalohydrolase (MTHase), from *Sulfolobus acidocaldarius* ATCC 33909. The optimum pH was 5.5 and the optimum temp. was 55-57.degree. C using isoamylase from *Pseudomonas amyloclavata* as a debranching enzyme. The addition of CGTase to the reaction mixture during the saccharification process caused an increase in **trehalose** and a decrease in maltose and maltotriose. Isoamylase was better than pullulanase as a debranching enzyme. The yield of **trehalose** was independent of the type of starch used. Under optimum conditions, the yield of **trehalose** from corn starch at 30% concn. was >82%. (AS)

CC L (Sugars, Syrups and Starches)

CT Sugars; Enzymes; Starch; **TREHALOSE**; **PATENTS**

L126 ANSWER 4 OF 17 FSTA COPYRIGHT 1999 IFIS

AN 97(04):L0023 FSTA FS FSTA

TI High **trehalose** content syrup.

AU Okada, K.; Shibuya, T.; Miyake, T.

CS KK Hayashibara Seibutsu Kagaku Kenkyujo

SO European Patent Application

PI EP 739986 A1 1996

PRAI JP 95-110291 12 Apr. 1995 (Hayashibara Seibutsu Kagaku Kenkyujo, Okayama, Japan)

DT Patent (Patent)

LA English

AB A high **trehalose** content syrup, in which are dissolved **trehalose** in an amount greater than its water solubility and other saccharide(s), has a lower DE and viscosity, and a higher sweetening power than conventional starch sugars. The syrup is stable, free of or substantially free of crystallization, and substantially free of bacterial contamination even at ambient temp. [From En summ.] (VJG)

CC L (Sugars, Syrups and Starches)

CT Sugar syrups; **Patents**; **TREHALOSE**; **SYRUPS**

L126 ANSWER 5 OF 17 FSTA COPYRIGHT 1999 IFIS

AN 97(02):P0123 FSTA FS FSTA

TI Yogurt.

AU Akahoshi, R.; Mizobuchi, T.; Takahashi, Y.; Saita, T.

CS KK Yakult Honsha

SO PCT International Patent Application

PI WO 96/25050 A1 1996

PRAI JP 95-52067 17 Feb. 1995 (KK Yakult Honsha, Tokyo, Japan)

DT Patent (Patent)

LA Japanese SL English

AB A method for manufacture of yoghurt containing highly unsaturated fatty

acids, such as docosaheptaenoic acid or eicosapentaenoic acid, is described. A sweetener (selected from palatinose, palatinit, maltose, maltitol, glucose, reducing glucose and **trehalose**) is added to yoghurt containing lactic acid bacteria and Bifidobacterium; a refined fish oil containing the highly unsaturated fatty acids is then added. The resulting mixture is packaged into a hermetically sealed container with O₂ barrier properties. The yoghurt has good flavour properties, without having a fishy aroma, and is stable over a reasonable storage period. [From En summ.] (HAS)

CC P (Milk and Dairy Products)

CT Fatty acids; **Patents**; Yoghurt; UNSATURATED FATTY ACIDS; Fermented dairy products; Acids; Lipids

L126 ANSWER 6 OF 17 FSTA COPYRIGHT 1999 IFIS

AN 97(02):L0044 FSTA FS FSTA

TI Process for the production of galactosyltrehalose and foods containing thereof.

AU Kase, T.; Motojima, K.; Sakai, J.; Takahashi, E.; Konai, Y.

CS Kureha Chemical Industry Co. Ltd.

SO European Patent Application

PI EP 731172 A2 1996

PRAI JP 95-78313 9 Mar. 1995 (Kureha Chemical Industry, Chuo-ku, Tokyo, Japan)

DT Patent (Patent)

LA English

AB A process for the manufacture of galactosyltrehalose for use in foods is described. Galactosyltrehalose is prepared by addition of .beta.-galactosidase to lactose, or to a raw material containing lactose and **trehalose** or just **trehalose**. [From En summ.] (HAS)

CC L (Sugars, Syrups and Starches)

CT Sugars; **Patents**; GALACTOSYLTREHALOSE; Carbohydrates

L126 ANSWER 7 OF 17 FSTA COPYRIGHT 1999 IFIS

AN 96(06):M0161 FSTA FS FSTA

TI Method for producing bread.

AU Ohtani, M.; Usui, N.; Okita, N.

CS Ajinomoto Co. Inc.

SO European Patent Application

PI EP 688501 A1 1995

PRAI JP 94-139592 31 May 1994 (Ajinomoto, Tokyo 104, Japan)

DT Patent (Patent)

LA English

AB A rapid method for producing bread is described. Bread dough containing **trehalose** is fermented with yeast and baked. The bread has a good colour, taste (flavour) and shelf life. [From En summ.] (VJP)

CC M (Cereals and Bakery Products)

CT **Patents**; Breadmaking; Processing

L126 ANSWER 8 OF 17 FSTA COPYRIGHT 1999 IFIS

AN 96(06):L0045 FSTA FS FSTA

TI Saccharide composition with reduced reducibility, and preparation and uses thereof.

AU Shibuya, T.; Sugimoto, T.; Miyake, T.

CS KK Hayashibara Seibutsu Kagaku Kenkyujo

SO European Patent Application

PI EP 690130 A1 1996

PRAI JP 94-180393 27 Jun. 1994 (KK Hayashibara Seibutsu Kagaku Kenkyujo, Okayama-shi, Okayama, Japan)

DT Patent (Patent)
 LA English
 AB Preparation and use of a saccharide composition with a reduced reducibility is described. The composition is prepared by hydrogenating a saccharide mixture comprising reducing saccharides and non-reducing saccharides consisting of **trehalose** and/or saccharides having a **trehalose** structure. The resulting composition has satisfactory sweetness, taste and stability, and can be used in foods, cosmetics and pharmaceuticals susceptible to reduction. [From En summ.] (TJR)
 CC L (Sugars, Syrups and Starches)
 CT Sugars; **Patents**; SACCHARIDES; Carbohydrates

L126 ANSWER 9 OF 17 FSTA COPYRIGHT 1999 IFIS
 AN 95(08):B0098 FSTA FS FSTA
 TI Production of **trehalose** in plants.
 AU Hoekema, A.; Pen, J.; Does, M. P.; Elzen, P. J. M. van den
 CS Mogen International NV
 SO PCT International Patent Application
 PI WO 95/06126 1995
 PRAI PC 93-/02290 24 Aug. 1993 (Mogen International, NL-2333 CB, Leiden, Netherlands)
 DT Patent (Patent)
 LA English
 AB The production of **trehalose** in a plant host due to the presence of a plant expressible gene in the host is presented. The plant expressible gene comprises: a transcriptional initiation region (functional in plant host); a DNA sequence encoding a **trehalose** phosphate synthase; and a transcriptional termination sequence (functional in plant host). [From En summ.] (VJP)
 CC B (Biotechnology)
 CT **Patents**; Plants; Sugars nonreducing; Gene expression; **TREHALOSE**; Sugars; Genetics

L126 ANSWER 10 OF 17 FSTA COPYRIGHT 1999 IFIS
 AN 92(09):N0075 FSTA FS FSTA
 TI Saccharide fatty acid polyester fat substitutes.
 AU Meyer, R. S.; Akoh, C. C.; Swanson, B. G.; Winter, D. B.; Root, J. M.; Campbell, M. L.
 CS Curtice-Burns Inc.
 SO PCT International Patent Application
 PI WO 92/03060 A1 1992
 PRAI WO 90/04769 (US) (900822) [Curtice-Burns, Rochester, NY, USA]
 DT Patent (Patent)
 LA English
 AB A fat substitute food composition is prepared in which 0.5-95% of the total fat content comprises a polysaccharide fatty acid polyester. The process comprises esterifying hydroxyl groups of a saccharide to form a lower acyl ester saccharide, and admixing the lower acyl ester saccharide, a fatty acid lower alkyl ester, and an alkali metal catalyst to form a reaction mixture. The reaction mixture is heated to 100-125.degree. C and maintained at that temp. for a predetermined period of time. A low vacuum of from 0 to 10 torr is drawn over the reaction mixture. Yields of 95-99% can be achieved using this method. Novel saccharide polyesters such as raffinose fatty acid polyester, stachyose fatty acid polyester, and **trehalose** fatty acid polyester can be produced. (VJG)
 CC N (Fats, Oils and Margarine)
 CT **Patents**; Polysaccharides; Fatty acids; Fats; POLYESTERS; FAT SUBSTITUTES; WORLD; Carbohydrates; Lipids

L126 ANSWER 11 OF 17 FSTA COPYRIGHT 1999 IFIS

AN 91(10):V0037 FSTA FS FSTA

TI Sweetened condensed milk like composition and a method for producing it.

AU Iijima, Y.; Yamabe, R.; Nakatsukasa, M.; Ogiwara, H.

CS Lotte Co. Ltd.

SO United States Patent

PI US 4948616 1990

PRAI US 89-347385 2 May 1989 (Lotte, Tokyo, Japan)

DT Patent

LA English

AB Sweetened condensed milk composition comprises palatinose and palatinose syrup in a solids wt. ratio of <2:1, preferably 1:1. The sugar composition of a constituent sugar solution preferably includes 70% palatinose and 20% **trehalulose**, with, preferably, milk solids at 25% and water at 30%. The basic milk may be raw, partially or fully skimmed, processed or evaporated (whole or skim). [From En summ.] (HBr)

CC V (Patents)

CT Milk; CONDENSED MILK; **PATENTS**; Dairy products

L126 ANSWER 12 OF 17 FSTA COPYRIGHT 1999 IFIS

AN 89(10):V0015 FSTA FS FSTA

TI Food process.

AU Roser, B. J.

CS Quadrant Bioresources Ltd.

SO European Patent Application

PI EP 297887 A1 1989

PRAI GB 87-/15238 29 Jun. 1987 (Quadrant Bioresources Ltd., Bedfordshire, UK)

DT Patent

LA English

AB A method for spray-drying high-protein foods, e.g. whole milk, eggs, fruit juices or coffee, is characterized by incorporation of **trehalose**, .alpha.-D -glucopyranosyl-.alpha.-D -glucopyranoside, into the food to be dried. It is claimed that **trehalose** protects the proteins in the foods from denaturation, resulting in reconstituted products with properties similar to those of the original foods. (DSA)

CC V (Patents)

IT Spray-drying; foods, spray-drying of proteins high, **Patent**

IT Proteins; foods, spray-drying of proteins high, **Patent**

IT Drying

L126 ANSWER 13 OF 17 FSTA COPYRIGHT 1999 IFIS

AN 89(07):V0005 FSTA FS FSTA

TI Drying water-containing foodstuff.

AU Roser, B. J.

CS Quadrant Bioresources Ltd.

SO UK Patent Application

PI GB 2206273 A 1989

PRAI GB 87-15238 29 Jun. 1987 (Quadrant Bioresources, Soulbury, UK)

DT Patent

LA English

AB A method of drying a water-containing food or beverage at a temp. above ambient is characterized by incorporation of **trehalose** at a **trehalose:protein** ratio of 1:2.5-1.75. Applications cited are milk, eggs and fruit and vegetable products (juices, concentrates, pastes, purees). (HBr)

CC V (Patents)

IT Drying; milk, drying of, **Patent**

IT Drying; foods, drying of moisture-containing, **Patent**

IT Moisture content; foods, drying of moisture-containing, **Patent**

IT Milk; drying of milk, **Patent**

L126 ANSWER 14 OF 17 FSTA COPYRIGHT 1999 IFIS

AN 87(03):V0062 FSTA FS FSTA

TI Freeze resistant dough and novel microorganism for use therein.

AU Uno, K.; Oda, Y.; Shigenori, O.

CS Kyowa Hakko Kogyo Co. Ltd.

SO European Patent Application

PI EP 196233 A2 1986

DT Patent

LA English

AB A freeze-resistant dough containing flour, water, and a yeast (*Saccharomyces* sp.) is described. The yeast is capable of maltose fermentation and can withstand freezing. It is characterized by a sporulation ratio of P10% and a **trehalose** content (in the microbial cells) of P5%. [From En summ.] (DMA)

CC V (Patents)

IT Yeasts bakers; dough, yeasts for freeze resistant, **Patent**

IT Freezing; dough, yeasts for freeze resistant, **Patent**

IT Dough; yeasts for freeze resistant dough, **Patent**

L126 ANSWER 15 OF 17 FSTA COPYRIGHT 1999 IFIS

AN 83(12):M2117 FSTA FS FSTA

TI [Method for production of bakers' yeast.]

AU Fabian, J.; Beran, J.; Havlik, S.

SO Czechoslovak Patent, 204 593.

PI 1981

DT Patent

LA Czech

AB A method for producing bakers' yeast with high concn. of glycogen and **trehalose**, improved keeping qualities and resistance to dehydration involves adding all the minerals and N and P compounds to the fermentation vat during the period between the start of fermentation and the middle of the total fermentation time. Only pure molasses mash is subsequently added, and the need for a secondary fermentation phase is eliminated. (HBr)

CC M (Cereals and Bakery Products)

IT Yeasts bakers; bakers yeasts, quality improvement in, **Patent**

L126 ANSWER 16 OF 17 FSTA COPYRIGHT 1999 IFIS

AN 77(06):M0793 FSTA FS FSTA

TI [Method for production of baker's yeast.]

AU Semikhatova, N. M.; Chulina, E. P.; Lozenko, M. F.; Kochkina, I. B.

CS Union of Soviet Socialist Republics, Vsesoyuznyi Nauchno-issledovatel'skii Institut Khlebopekarnoi Promyshlennosti

SO USSR Patent, 544 670.

PI 1977

DT Patent

LA Russian

AB Yeast is cultivated in an aerated nutrient medium containing molasses as the C source, which is introduced in portions. To improve yeast quality and increase its stability by raising the **trehalose** content, molasses are initially introduced in an amount of 28-35% of the total amount to be used up to the start of periodic take-off of yeast suspension. Take-off is performed every 2 h in a portion of culture medium. During maturation of the suspension, molasses are preferably added during the second h in an amount of 0.2% calculated as sugar by vol. (W&Co)

CC M (Cereals and Bakery Products)

IT Yeasts (bakers); bakers yeasts, culture of, **Patent**, USSR
 IT Culture; bakers yeasts, culture of, **Patent**, USSR

L126 ANSWER 17 OF 17 FSTA COPYRIGHT 1999 IFIS
 AN 75(08):M0978 FSTA FS FSTA
 TI [Method of culture of baker's yeast.]
 AU Semikhatova, N. M.; Chulina, E. P.; Kochkina, I. B.; Ozhegova, E. I.
 CS Union of Soviet Socialist Republics, Vsesoyuznyi Nauchno-issledovatel'skii
 Institut Khlebopekarnoi Promyshlennosti
 SO USSR Patent, (1974) 455 146.
 DT Journal
 LA Russian
 AB Yeast is cultivated in a nutrient medium containing mineral salts and
 sources of C and N. The yeast is matured in 2 stages, which increases
trehalose content and partially inactivates proteolytic enzymes.
 (W&Co)
 CC M (Cereals and Bakery Products)
 IT Yeasts (bakers); bakers yeasts, culture media for, **Patent**, USSR
 IT Culture; bakers yeasts, culture media for, **Patent**, USSR
 IT Media; bakers yeasts, culture media for, **Patent**, USSR

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FILE LAST UPDATED: 02 FEB 1999 <19990202/UP>

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(FILE 'FROSTI' ENTERED AT 13:39:22 ON 08 FEB 1999)

E TREHALOSE
 L127 349 S E3-E6,E8
 E VEGETABLE/CT
 L128 16370 S E3
 L129 7 S L127 AND L128
 L130 3 S L129 AND VEGETABLE#/TI
 E PLANT/CT
 L131 1808 S E3
 E PLANTS/CT
 L132 1797 S E3
 L133 2 S L127 AND L131,L132
 L134 5 S L130,L133

FILE 'FROSTI' ENTERED AT 13:47:35 ON 08 FEB 1999

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L134 ANSWER 1 OF 5 FROSTI COPYRIGHT 1999 LFRA
 AN 473067 FROSTI
 TI Freshness retaining agent for cut **vegetable** or cut fruit.
 IN Kajiwara S.; Ketsuen K.; Naruse H.
 PA Kyokuto Int. Corp.; Hayashibara Biochem. Lab Inc.
 SO Japanese Patent Application
 PI JP 09252719 A 19970930
 AI 19960321
 NTE 19970930

DT Patent
 LA Japanese
 SL English
 AB An inexpensive freshness-retaining agent for cut fruit or vegetables is disclosed, which consists of 20-62 wt% ethanol, 2.5-20 wt% **trehalose**, 0.1-0.5 wt% ascorbic acid, and water. The product is safe and can be used to retain the freshness of cut fruit and vegetables for a period of about 5 days.
 SH FRUIT AND VEGETABLE PRODUCTS
 CT ASCORBIC ACID; CUT; CUT FRUIT; CUT VEGETABLES; ETHANOL; FRESHNESS; FRUIT;
 INCREASE; JAPANESE PATENT; RETENTION; SHELF LIFE; **TREHALOSE**;
VEGETABLES
 DED 6 Aug 1998

L134 ANSWER 2 OF 5 FROSTI COPYRIGHT 1999 LFRA
 AN 471259 FROSTI
 TI Freshness holding method for cut **vegetable**.
 IN Kajiwara S.; Ketsuen K.; Naruse H.
 PA Kyokuto Int. Corp.; Hayashibara Biochem. Lab. Inc.
 SO Japanese Patent Application
 PI JP 09224565 A 19970902
 AI 19960226
 NTE 19970902
 DT Patent
 LA Japanese
 SL English
 AB The invention relates to a method for retaining the freshness of cut vegetables safely. The method involves contacting the cut produce with a solution containing 0.8-1.5 wt% ethanol, 0.1-5 wt% **trehalose** and 0.005-0.3 wt% ascorbic acid. The method is low-cost and results in an increased shelf-life for cut vegetables.
 SH FRUIT AND VEGETABLE PRODUCTS
 CT ASCORBIC ACID; CUT; CUT VEGETABLES; ETHANOL; FRESHNESS; JAPANESE PATENT;
 RETAINING; **TREHALOSE**; **VEGETABLES**
 DED 21 Jul 1998

L134 ANSWER 3 OF 5 FROSTI COPYRIGHT 1999 LFRA
 AN 469883 FROSTI
 TI Stabilization by **trehalose** of superoxide dismutase-like activity of various **vegetables**.
 AU Aga H.; Shibuya T.; Chaen H.; Fukuda S.; Kurimoto M.
 SO Nippon Shokuhin Kagaku Kogaku Kaishi, 1998, 45 (3), 210-215 (11 ref.)
 DT Journal
 LA Japanese
 SL English
 AB The effect of **trehalose** on the superoxide dismutase-like activity of different vegetables was examined in this study. Minced carrot and **trehalose** were mixed and dried under vacuum at 40 C for 40 hours. The dried matter was powdered and preserved at 40 C. The remaining superoxide dismutase-like activity of the powder was higher than that of the carrot powder alone. For the sugars tested - **trehalose**, glucose, sorbitol, mannitol, maltose, and sucrose - **trehalose** was the most effective in stabilizing superoxide dismutase-like activity. The same effect occurred with other vegetable powders. The authors suggest that **trehalose** stabilizes both superoxide dismutase and antioxidants in vegetables.
 SH FRUIT AND VEGETABLE PRODUCTS

CT CARROTS; ENZYMIC ACTIVITY; STABILITY; SUGARS; SUPEROXIDE
DISMUTASE;

TREHALOSE; VEGETABLE POWDERS; VEGETABLES

DED 23 Jun 1998

L134 ANSWER 4 OF 5 FROSTI COPYRIGHT 1999 LFRA

AN 415417 FROSTI

TI Enhanced accumulation of **trehalose** in plants.

IN Goddijn O.J.M.; Verwoerd T.C.; Krutwagen R.W.H.H.; Voogd E.

PA Mogen International

SO PCT Patent Application

PI WO 9621030 A1

AI 19960103

PRAI Netherlands 19950104; 19950907

DT Patent

LA English

SL English

AB A method for the production of **trehalose** in plant cells is described, and a method for increasing the levels of **trehalose** in plants capable of producing **trehalose** is disclosed.

Trehalose is a widespread naturally occurring disaccharide, which is generally not found in plants. The method uses Angiospermae or other higher plants. The plant or plant cells are cultivated in the presence of a **trehalose** inhibitor.

SH PROCESSING

CT ANGIOSPERMAE; DISACCHARIDES; INCREASE; PCT PATENT; **PLANTS*****

;

*****TREHALOSE**

DED 15 Aug 1996

L134 ANSWER 5 OF 5 FROSTI COPYRIGHT 1999 LFRA

AN 361654 FROSTI

TI **Trehalose** is a sweet target for agbiotech. (A new sweetening agent.)

AU Anon.

SO Biotechnology, 1994, 12 (13), 1328 (0 ref.)

DT Journal

LA English

AB **Trehalose** is a new sweetening agent that is reported to be capable of improving quality and flavour by making dried and processed foods taste fresher. This article considers **trehalose**, its development and applications. Osmotica Foods is to develop

trehalose-based foods and food ingredients and MOGEN

International and D.J. van der Have are collaborating on the synthesis of **trehalose** in plants.

SH SWEETENERS

CT GENETICS; NEW PRODUCTS; **PLANTS**; SWEETENERS;

*****TREHALOSE*****

DED 12 Jan 1995

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 DERWENT WEEK FOR POLYMER INDEXING: 199905
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E TREHALOSE
 L137 642 S E3
 L138 27 S L137 AND (AGA H? OR SHIBUYA T? OR FUKUDA S? OR MIYAKE
 T?)/AU
 L139 0 S L138 AND PULLULAN?
 L140 0 S L138 AND CYCLODEXTRIN
 L141 0 S L138 AND CYCLO DEXTRIN
 L142 2 S L137 AND PULLULAN?
 L143 18 S L137 AND CYCLODEXTRIN?
 L144 0 S L137 AND CYCLO DEXTRIN?
 E JP9763987/AP, PRN
 L145 1 S E4
 E JP9817647/AP, PRN
 L146 1 S E4
 L147 1 S L145, L146
 E R06064+ALL/DCN
 L148 293 S E1
 L149 730 S L137, L148
 L150 2 S L149 AND (B14-S08 OR C14-S08 OR D01-H01P)/MC
 L151 6 SEA Q624/M0, M1, M2, M3, M4, M5, M6 AND L149
 L152 7 S L150, L151
 L153 27 S L149 AND (AGA H? OR SHIBUYA T? OR FUKUDA S? OR MIYAKE
 T?)/AU
 L154 0 S L153 AND PULLULAN
 L155 4 S L153 AND ?DEXTRIN?
 L156 1 S L153 AND ANTIOXID?
 L157 0 S L153 AND ANTI OXID?
 L158 11 S L152, L155, L156
 L159 10 S L149 AND EDIB?
 L160 7 S L149 AND CONSUM?
 L161 17 S L159, L160
 L162 1 S L161 AND PULLULAN
 L163 1 S L161 AND ?DEXTRIN?
 L164 13 S L162, L163, L158
 L165 79 S L149 AND A61K031-70/IC, ICM
 L166 2 S L165 AND L151
 L167 1 S L165 AND ANTIOXID?
 L168 2 S L166, L167
 L169 13 S L164, L168

FILE 'WPIDS' ENTERED AT 14:05:02 ON 08 FEB 1999

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L169 ANSWER 1 OF 13 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD
 AN 98-508303 [44] WPIDS
 DNC C98-153424
 TI Agent for inhibiting reduction of active-oxygen eliminating activity -
 comprising **trehalose**, and its use in compositions comprising
 plant edible substances or plant **antioxidants**.
 DC B04 D13 D21
 IN AGA, H; FUKUDA, S; MIYAKE, T; SHIBUYA,
 T
 PA (HAYB) HAYASHIBARA SEIBUTSU KAGAKU
 CYC 24
 PI EP 868916 A2 981007 (9844)* EN 23 pp A61K031-70 <--
 R: AL AT BE CH DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO
 SE SI
 ADT EP 868916 A2 EP 98-301575 980303
 PRAI JP 98-17647 980114; JP 97-63987 970304
 IC ICM A61K031-70
 AB EP 868916 A UPAB: 981104
 An agent (A) for inhibiting reduction in active-oxygen eliminating
 activity comprising of **trehalose** is new. Also claimed are a
 method of inhibiting the reduction of active-oxygen eliminating activity
 of a plant substance in an aqueous system by incorporating (A); and a
 composition obtained by incorporating (A) into a plant substance having
 active-oxygen eliminating activity.
 USE - The compositions have at least 5 (preferably at least
 10) units/g composition of active-oxygen eliminating activity (determined
 by the nitroblue tetrazolium test), and can be administered to impart
 active-oxygen eliminating activity with reduced deterioration of their
 quality. The compositions are useful for maintaining and promoting
 health; preventing aging and geriatric diseases; promoting treatment of
 incurable diseases; and inhibiting carcinogenesis. They may be food
 products, cosmetics, pharmaceuticals, or their materials or intermediates.
 Dwg.0/0
 FS CPI
 FA AB; DCN
 MC CPI: B07-A02B; B14-E11; B14-H01; B14-R01; B14-S08; D03-H01T2

L169 ANSWER 2 OF 13 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD
 AN 98-437140 [37] WPIDS
 DNC C98-132862
 TI Pain reducing parenteral formulation comprises macrolide drug - such as
 clarithromycin, azithromycin, roxithromycin, etc., entrapped in liposome
 vesicle.
 DC B03 B05 B07
 IN FLOOD, K M; LIU, R; PECK, K D; ZHENG, J
 PA (ABBO) ABBOTT LAB
 CYC 80
 PI WO 9833482 A1 980806 (9837)* EN 24 pp A61K009-127
 RW: AT BE CH DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA
 PT SD SE SZ UG ZW
 W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE
 GH GM GW HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG
 MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG
 UZ VN YU ZW
 AU 9860414 A 980825 (9903) A61K009-127
 ADT WO 9833482 A1 WO 98-US1430 980126; AU 9860414 A AU 98-60414 980126
 FDT AU 9860414 A Based on WO 9833482
 PRAI US 98-3606 980107; US 97-794064 970204
 IC ICM A61K009-127

ICS A61K031-70

AB WO 9833482 A UPAB: 980916

A pain reducing parenteral formulation comprises a macrolide drug selected from erythromycin A, B, C and D; clarithromycin; azithromycin; dirithromycin; josamycin; midecamycin; kitasamycin; roxithromycin; rokitamycin; oleandomycin; miocamycin; flurithromycin; rosaramicin; 8,9-anhydro-4''-deoxy-3'-N-desmethyl -3'-N-ethylerythromycin B 6,9-hemiacetal; 8,9-anhydro-4''-deoxy-3'-N-desmethyl -3'-N-ethylerythromycin A 6,9-hemiacetal and 11-amino-11-deoxy-3-oxo-5-O-desosaminyl-6-O- [1'-3'-quinolyl-2'-propenyl]- erythronolide A 11,12-cyclic carbamate entrapped in a liposome vesicle comprising a lipid, in which at least 1 lipid is negatively charged, and the molar ratio of the drug to the lipid is 1:2 to 1:100. Also claimed is a method of reducing injection site pain caused by a macrolide drug comprising administration of a parenteral formulation comprising the macrolide drug entrapped in a liposome vesicle.

USE - The formulations are effective for reducing the pain at the injection site typically associated with the injection of macrolide antibiotics.

ADVANTAGE - The addition of a disaccharide or polysaccharide to the formulation provides instantaneous hydration and the largest surface area for depositing a thin film of the drug-lipid complex. This thin film provides for faster hydration so that, when liposome is initially formed by adding the aqueous phase, the liposomes formed are of a smaller and more uniform particle size. This provides significant advantages in terms of manufacturing ease. The packing of bilayers in the liposome vesicle is very tight with higher glass transition temperature than that of miscelles and emulsions, and, therefore, the liposome vesicle is more rigid and less dynamic than micelles and emulsions. The physical barriers created by the liposomes are effective against rapid movement of the drug from them at the injection site after such infusion, thereby reducing the concomitant pain.

Dwg.0/5

FS CPI

FA AB; DCN

MC CPI: B02-Z; B14-C01

L169 ANSWER 3 OF 13 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD

AN 98-430851 [37] WPIDS

DNC C98-130000

TI **Edible** sheet for foods and medical products - contains excipients, plasticisers and binders.

DC B07 D13

PA (OSAK) OSAKA KAGAKU GOKIN KK

CYC 1

PI JP 10179045 A 980707 (9837)* 6 pp A23L001-00

ADT JP 10179045 A JP 96-357036 961225

PRAI JP 96-357036 961225

IC ICM A23L001-00

ICS A23G003-00; A23L001-30; A23P001-12; A61K031-135; A61K035-78; A61K047-10; A61K047-36; A61K047-38

AB JP10179045 A UPAB: 980916

Edible sheet contains excipients, plasticisers and binders.

The **edible** sheet preferably comprises 35-85 wt.% excipients e.g. sugar, sugar alcohol powder, starch, and/or crystalline cellulose, 10-40 wt.% plasticisers e.g. glycerine, propylene glycol, saturated aqueous solution of sugar alcohol and/or saturated aqueous solution of oligosaccharide and 1-25 wt.% binders e.g. water-soluble polysaccharide such as pullulan, gelatin or locust bean gum.

USE - The sheet is used as a support base for mouth melting foods and medical products such as cough cubes.

Dwg.0/0

FS CPI
FA AB; DCN
MC CPI: B04-C02; D03-H01K

L169 ANSWER 4 OF 13 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD

AN 98-079852 [08] WPIDS

DNC C98-026658

TI Food preserving agent which can be added at any stage - comprises mono glyceride poly carboxylic acid ester or salt thereof and further compound(s) such as organic acid, amino acid and/or sintered calcium etc..

DC D13 E17

PA (ASAM-N) ASAMA KASEI KK; (LIOY) LION CORP

CYC 1

PI JP 09206045 A 970812 (9808)* 10 pp A23L003-3517

ADT JP 09206045 A JP 96-37102 960201

PRAI JP 96-37102 960201

IC ICM A23L003-3517

AB JP09206045 A UPAB: 980223

A food preserving agent comprises (i) a monoglyceride polycarboxylic acid ester or its salt of formula $R1-C(O)-O-CH_2-CH(OZ1)-CH_2OZ2$ (1); and (ii) a compound(s) selected from (a) organic acid or its salt, (b) fatty acid ester of polyhydric alcohol, (c) amino acid, (d) antimicrobial peptide or protein, (e) polysaccharides comprising disaccharides, sugar alcohol, saccharides, sugar acid and amino saccharides and its partially decomposed matter, (f) spice, (g) its pure oil or vegetable component, (h) alcohol and (i) sintered calcium. In (1), $R1=7-17C$ straight or branched alkyl or alkenyl; and $Z1, Z2 =$ one is polycarboxylic acid or the residue of its salt; the other is H or polycarboxylic acid or the residue of its salt.

USE - The product is added or mixed in any stage of the production process of the processed food.

ADVANTAGE - The product has good corrosion prevention effect. Taste and colour of the food are not damaged.

Dwg.0/0

FS CPI
FA AB; DCN
MC CPI: D03-H02E; E07-A02; E10-A07; E10-B02; E10-C04; E10-E04K

L169 ANSWER 5 OF 13 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD

AN 96-393036 [39] WPIDS

DNC C96-123627

TI Yoghurt with good flavour, stability with no fish smell - contains fish oil contg. highly unsatd. fatty acids, sweetener, lactic acid bacteria and Bifidobacteria.

DC B04 B05 D13

IN AKAHOSHI, R; MIZOBUCHI, T; SAITA, T; TAKAHASHI, Y; MIZOBUSHI, T

PA (HONS) YAKULT HONSHA KK

CYC 11

PI WO 9625050 A1 960822 (9639)* EN A23C009-127

RW: BE DE DK FR GB SE

W: AU KR US

JP 08214774 A 960827 (9644) 5 pp A23C009-127

AU 9646757 A 960904 (9705) A23C009-127

EP 809939 A1 971203 (9802) EN 8 pp A23C009-127

R: BE DE DK FR GB NL SE

JP 2780154 B2 980730 (9835) 5 pp A23C009-127

AU 697595 B 981008 (9901) A23C009-127

ADT WO 9625050 A1 WO 96-JP330 960215; JP 08214774 A JP 95-52067 950217; AU 9646757 A AU 96-46757 960215, WO 96-JP330 960215; EP 809939 A1 EP 96-902446 960215, WO 96-JP330 960215; JP 2780154 B2 JP 95-52067 950217; AU 697595 B AU 96-46757 960215

FDT AU 9646757 A Based on WO 9625050; EP 809939 A1 Based on WO 9625050; JP 2780154 B2 Previous Publ. JP 08214774; AU 697595 B Previous Publ. AU 9646757, Based on WO 9625050

PRAI JP 95-52067 950217

REP JP 372264; JP 690662

IC ICM A23C009-127
ICS A23C009-123; A23C009-13

AB WO 9625050 A UPAB: 961004
Yoghurt comprises 1 sweetener selected from palatinose, palatinit, maltose, maltitol, glucose, reducing glucose and **trehalose**, lactic acid bacteria and Bifidobacterium and a refined fish oil contg. highly unsatd. fatty acids such as DHA or EPA. The resulting mixt. is packed in a hermetically sealed container exhibiting oxygen barrier properties.
USE - The yoghurt contains highly unsatd. fatty acids and retains good flavour and stable quality over a generally expected storage term without giving any fishy odour.

FS CPI

FA AB; DCN

MC CPI: B04-B01C2; B04-F10; B07-A02; B10-A07; B11-C06; B12-M06; B14-E11;
B14-S08; D03-B14

L169 ANSWER 6 OF 13 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD

AN 96-059738 [07] WPIDS

DNC C96-019996

TI Non-reducing sugar prods. made from liquefied starch soln. - by treatment with combination of enzymes.

DC B03 D13 D16 D17 D21 E13

IN MANDAI, T; MIYAKE, T; SHIBUYA, T; SUGIMOTO, T

PA (HAYB) HAYASHIBARA SEIBUTSU KAGAKU

CYC 11

PI EP 691407 A1 960110 (9607)* EN 59 pp C12P019-18
R: BE CH DE ES FR GB IT LI NL
CA 2152563 A 951228 (9616) C12P019-12
JP 08073504 A 960319 (9621) 34 pp C08B037-00

ADT EP 691407 A1 EP 95-304439 950623; CA 2152563 A CA 95-2152563 950623; JP 08073504 A JP 95-116583 950419

PRAI JP 95-116583 950419; JP 94-165815 940627

REP 01Jnl.Ref ; JP 63216492; WO 9203565; WO 9207947

IC ICM C08B037-00; C12P019-12; C12P019-18
ICS A23L001-09; A23L001-22; A23L001-236; A61K007-00; A61K031-70;
A61K047-26; A61K047-36; C07H003-04; C07H003-06; C12P019-00;
C12P019-16; C12P019-22

ICA A23L001-307

AB EP 691407 A UPAB: 960222
The following are claimed: (1) a non-reducing saccharide obtainable by treating a liquefied starch soln. with a combination of (a) a non-reducing sugar-forming enzyme and opt. a **trehalose**-releasing enzyme and (b) a starch-debranching enzyme and/or **cyclomaltodextrin** glucanotransferase; (2) a 'less reducing saccharide' which contains the saccharide of (1); (3) a process for producing the saccharide of (1) or (2), comprising treating a liquefied starch soln. with a combination of (a) a non-reducing-sugar-forming enzyme and opt. a **trehalose**-releasing enzyme and (b) a starch-debranching enzyme and/or **cyclomaltodextrin** glucanotransferase; (4) a process as above where

the prod. is opt. treated with beta-amylase, glucoamylase or alpha-glucosidase and is fractionated by column chromatography; and (5) a compsn. (a food product, cosmetic or medicine) contg. the saccharide of (1) or (2).

USE - The saccharides can be used, e.g. as sweeteners, flavour enhancers, taste maskers, stabilisers, excipients, fillers and diluents in foods, tobacco prods., animal feeds, cosmetics and pharmaceutical prods.

ADVANTAGE - The saccharides have a mild sweetness, have good handling properties (e.g. as syrups or powders), and do not undergo significant Maillard reaction with amino acids or proteins.

Dwg.0/17

FS CPI

FA AB; DCN

MC CPI: B07-A02; B14-E11; D03-G01; D03-H01A; D03-H01C; D03-H01H; D03-H01L; D03-H01Q; D05-A02C; D06-H01; D07-C; D08-B11; E07-A02D; E07-A02H; E10-A07

L169 ANSWER 7 OF 13 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD

AN 96-051264 [06] WPIDS

DNC C96-016888

TI Saccharide compsns. with low dextrose equiv. - contg. sugar alcohol and non-reducing sugar.

DC B03 B07 D13 D16 D18 D21 E13

IN MIYAKE, T; SHIBUYA, T; SUGIMOTO, T

PA (HAYB) HAYASHIBARA SEIBUTSU KAGAKU

CYC 17

PI EP 690130 A1 960103 (9606)* EN 62 pp C12P019-12

R: AT BE CH DE DK ES FR GB IT LI MC NL PT SE

BR 9502955 A 960312 (9616) C07H003-04

JP 08073482 A 960319 (9621) 33 pp C07H003-06

US 5681826 A 971028 (9749) 41 pp A61K031-715

US 5789392 A 980804 (9838) A61K031-715

ADT EP 690130 A1 EP 95-304438 950623; BR 9502955 A BR 95-2955 950627; JP 08073482 A JP 95-182216 950627; US 5681826 A US 95-492691 950620; US 5789392 A Div ex US 95-492691 950620, US 97-883079 970626

FDT US 5789392 A Div ex US 5681826

PRAI JP 94-180393 940627

REP 01Jnl.Ref ; EP 532807; EP 606753; JP 63216492; WO 9203565

IC ICM A61K031-715; C07H003-04; C07H003-06; C12P019-12

ICS A23L001-09; A23L001-22; A23L001-236; A61K007-00; A61K031-70; A61K047-26; A61K047-36; C07H001-00; C08B037-00; C12P019-00; C12P019-14; C12P019-18

AB EP 690130 A UPAB: 960212

Saccharide compsns. with a low dextrose equivalent (DE) comprises a sugar alcohol (I) and a non-reducing sugar (II) selected from **trehalose** and **trehalose**-contg. sugars.

Also claimed are: (A) Prodn. of a compsn. as above by hydrogenating a mixt. of a starch-derived reducing sugar (III) and (II). (B) Process as above where the mixt. of (III) and (II) is prepd. by treating a liquefied starch soln. with a combination of, (a) a (I)-forming enzyme and opt. a **trehalose**-releasing enzyme; and (b) a starch-debranching enzyme and/or **cyclomaltodextrin** glucanotransferase. (C) Method for 'reducing the reducibility of a saccharide mixture with a reduced reducibility' which includes the step of hydrogenating a mixt. of (III) and (II).

(I) is **trehalose** of a sugar with a terminal or internal **trehalose** unit. (III) is glucose, maltose, maltotriose, maltotetraose and/or maltopentaose.

USE - The compsns. can be used as sweeteners, flavour enhancers,

stabilisers, excipients, fillers and diluents in foods, tobacco prods., animal feeds, cosmetics, pharmaceutical prods., etc..

ADVANTAGE - The process converts (III) to (I) without affecting (II), giving prods. with DE <1. The prods. have a mild sweetness and good handling properties (e.g. as low viscosity syrups or powders), and do not undergo significant Maillard reaction with amino acids or proteins.

Dwg.0/17

FS CPI

FA AB; DCN

MC CPI: B07-A02B; B10-A07; B14-E11; D03-G01; D03-H01A; D03-H01Q; D05-C03; D05-C08; D06-H; D07-C; D08-B; E07-A02D; E07-A02H; E10-A07

L169 ANSWER 8 OF 13 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD

AN 95-303538 [40] WPIDS

DNC C95-135806

TI Crystalline maltosyl glucoside - useful as sweetener and preservative for foodstuffs, pharmaceuticals and cosmetics.

DC B03 D13 D16 D21 E13

IN MIYAKE, T; SHIBUYA, T; SUGIMOTO, T; TABUCHI, A

PA (HAYB) HAYASHIBARA SEIBUTSU KAGAKU

CYC 4

PI EP 670326 A2 950906 (9540)* EN 30 pp C07H003-06

R: DE FR GB

JP 07291986 A 951107 (9602) 19 pp C07H003-06

EP 670326 A3 951018 (9616) C07H003-06

ADT EP 670326 A2 EP 95-301284 950228; JP 07291986 A JP 95-65261 950301; EP 670326 A3 EP 95-301284 950228

PRAI JP 94-54369 940301

REP No-SR.Pub ; 2.Jnl.Ref ; EP 480640; EP 606753

IC ICM C07H003-06

ICS C07H001-00; C12P019-04; C12P019-14; C12P019-18

AB EP 670326 A UPAB: 951011

Crystalline maltosyl glucoside (I) is new.

(I) is obtd. by (a) crystallising a soln. contg. maltosyl glucoside and collecting the crystal, or (b) treating an aq. soln. of maltosyl glucoside with alkali, subjecting it to column chromatography, and crystallising the resultant conc. fractions.

The maltosyl glucoside is obtd. by exposing (a) an aq. soln. contg. **trehalose** and an alpha-glucosyl saccharide to the action of a saccharide-transferring enzyme (II) or (b) a reducing partial starch hydrolysate to the action of a non-reducing saccharide-forming enzyme (III). Treatment with a hydrolase may follow (a) or (b).

(II) is pref. **cyclomaltodextrin** glucanotransferase, alpha-amylase, alpha-glucosidase or mixts..

(III) is capable of producing a non-reducing saccharide with a **trehalose** end-unit.

The hydrolysate has a glucose polymerisation degree of 3 or higher and the opt. hydrolase is beta-amylase or a mixt. of beta-amylase and a starch-debranching enzyme.

USE - (I) is useful as a sweetener and preservative in the prepn. of foods, beverages, pet foods, cosmetics and pharmaceuticals, e.g. lipstick, cigarette, tobacco, dentifrice, oral refreshing agent and gargle.

(I) may also be used as a stabiliser, osmosis controller, vehicle, moisture controller, viscosity controller and quality improver in the prodn. of cosmetics, e.g. soap. skin cream, body shampoo, hair cream, lip cream and hair restorer.

ADVANTAGE - (I) is non-hygroscopic and free-flowing, readily handleable with less viscosity and solidification, which reduces costs necessary for controlling its package, transportation and storage.

Dwg.0/8
 FS CPI
 FA AB; DCN
 MC CPI: B04-C02X; B12-M06; D03-G01; D03-H01A; D05-A02C; D08-B03; D08-B08;
 D08-B09A; D08-B11; E07-A02H

L169 ANSWER 9 OF 13 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD

AN 94-346187 [43] WPIDS

DNC C94-157183

TI Isolation of **trehalose** by alcohol crystallisation - to give high purity **trehalose** useful as cell activity maintaining agent, anti-coldness agent and antifreeze agent in medicines and foods.

DC B03 D13 D16 E13 G04

PA (AJIN) AJINOMOTO KK

CYC 1

PI JP 06269288 A 940927 (9443)* 5 pp C12P019-12

ADT JP 06269288 A JP 93-15615 930202

PRAI JP 93-15615 930202

IC ICM C12P019-12

ICS C07H001-08; C07H003-04

AB JP06269288 A UPAB: 941216

Crystallisation of **trehalose** comprises adding aq.

trehalose and alcohol simultaneously in proportional amts.

USE/ADVANTAGE - **Trehalose** is useful as cell activity maintaining agent, anticoldness agent and antifreeze agent in medicines and foods. This method easily gives **trehalose** with high purity.

In an example, fermentation broth (protein concn. 2.0%) (approx. 2.2l) contg. **trehalose** (88g, as **trehalose** dihydrate) was centrifuged to separate the bacterial body (pH 7.8). Cation exchange resin column (2l) and anion exchange resin column (5l) were connected in series and the broth except the bacterial body was passed through the columns to give the desalted solution (5l). The soln. was treated with ultrafiltration (mol. wt. fraction 3000) to give the transmitted soln. (10l, protein concn. was not more than 0.01%). The soln. was conc. to give the conc. soln. (180 ml) contg. **trehalose** 35g/dl. 80% ethyl alcohol (50ml) was stirred at 40 deg. C. To it the conc. **trehalose** solution (180ml) and 100% ethyl alcohol (720ml) was simultaneously added at 50 ml/h and 200 ml/h, respectively. After approx. 30 min., soon after the soln. became cloudy, powdered **trehalose** dihydrate (approx. 0.5g) was added as seed crystal, and the addition was carried out for 3.6h. Then the mixt. was cooled to 5 deg. C by 5 deg. C/h. The crystal was sepd. by centrifugation and dried under reduced pressure at 40 deg. C for 15h to give **trehalose** dihydrate (78g) as crystal (99.5% purity).

Dwg.0/1

FS CPI

FA AB; GI; DCN

MC CPI: B07-A02B; B12-M06; D03-H01; D05-B; D05-C08; D05-H01; E07-A02;
 E11-Q01; G04-B01

L169 ANSWER 10 OF 13 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD

AN 94-341854 [42] WPIDS

DNC C94-155777

TI Solid, stabilised collagenase compsn. - is lyophilisate contg. e.g. albumin as stabiliser, with good activity retention during storage, for treating burns and ulcers, and for dissociating connective tissue.

DC B04 D16

IN DINH, T T; HORNACEK, C; LEE, C

PA (BAXT) BAXTER INT INC

CYC 18

PI WO 9424273 A1 941027 (9442)* 27 pp C12N009-96
 RW: AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE
 W: CA JP

ADT WO 9424273 A1 WO 94-US4082 940413

PRAI US 93-49016 930416

IC ICM C12N009-96
 ICS A61K037-54; C12N009-52

AB WO 9424273 A UPAB: 941212
 Solid, stabilised collagenase compsn. (A) is made by lyophilising a mixt. of collagenase (I) and stabiliser (II).
 (A) is used (1) for dissociation of connective tissue, partic. in vitro for dispersing cells in tissue cultures and (2) for treating burns and ulcers.
 (A) retains high levels of hydrolytic activity and solubility even after lyophilisation and long term storage, so provides a consistent level of specific activity.
 Dwg.0/0

FS CPI

FA AB; DCN

MC CPI: B04-L05C; B04-N02; B12-M06; B14-E08; B14-N17A; D05-H08; D05-H13

L169 ANSWER 11 OF 13 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD

AN 94-169894 [21] WPIDS

CR 95-216784 [29]

DNC C94-077641

TI Prodn. of saccharide carboxylic acid by oxidising sugar with Pseudo-gluconobacter - including new cpds. useful as sweeteners, clathrating agents for drugs, anticancer agents, etc. of good water solubility and stability against enzymes.

DC B03 B04 B05 C03 D13 D16 D21 E13

IN ISHIGURO, T; NOGAMI, I; OKA, M; YAMAGUCHI, T; NAKAGAWA, Y; UDA, Y; YAMAUCHI, T

PA (TAKE) TAKEDA CHEM IND LTD; (TAKE) TAKEDA PHARM IND CO LTD

CYC 24

PI EP 599646 A2 940601 (9421)* EN 44 pp C12P019-02
 R: AT BE CH DE DK ES FR GB GR IE IT LI LU NL PT SE

AU 9351948 A 940630 (9430) C07H007-033

CA 2110111 A 940528 (9431) C12P019-00

NZ 250284 A 940927 (9438) C12P019-00

JP 07076594 A 950320 (9520) 28 pp C07H007-033

US 5434061 A 950718 (9534) 30 pp C12P019-22

EP 599646 A3 950419 (9545) C12P019-02

AU 666234 B 960201 (9612) C07H007-033

TW 293036 A 961211 (9714) C07H013-02

CN 1093407 A 941012 (9717) C12P007-58

US 5629411 A 970513 (9725) 17 pp C07H015-24

US 5635610 A 970603 (9728) 29 pp C07H003-00

US 5635611 A 970603 (9728) 29 pp C07H003-00

SG 48777 A1 980518 (9834) C12P019-02

US 5840881 A 981124 (9903) C08B037-16

ADT EP 599646 A2 EP 93-309412 931125; AU 9351948 A AU 93-51948 931125; CA 2110111 A CA 93-2110111 931126; NZ 250284 A NZ 93-250284 931125; JP 07076594 A JP 93-288284 931117; US 5434061 A US 93-152122 931115; EP 599646 A3 EP 93-309412 931125; AU 666234 B AU 93-51948 931125; TW 293036 A TW 93-109415 931110; CN 1093407 A CN 93-114961 931126; US 5629411 A Div ex US 93-152122 931115, US 95-419393 950410; US 5635610 A Div ex US 93-152122 931115, US 95-419394 950410; US 5635611 A Div ex US 93-152122 931115, US 95-419397 950410; SG 48777 A1 SG 96-1582 931125; US 5840881 A CIP of US 93-152122 931115, CIP of US 94-353326 941205, US 95-437227 950508

FDT AU 666234 B Previous Publ. AU 9351948; US 5629411 A Div ex US 5434061; US 5635610 A Div ex US 5434061; US 5635611 A Div ex US 5434061; US 5840881 A CIP of US 5434061

PRAI JP 93-173121 930713; JP 92-318807 921127; JP 93-50652 930311; JP 93-305597 931206

REP No-SR.Pub ; EP 150085; EP 221707; EP 295861; EP 51707

IC ICM C07H003-00; C07H007-033; C07H013-02; C07H015-24; C08B037-16; C12P007-58; C12P019-00; C12P019-02; C12P019-22

ICS C07H005-00; C07H013-12; C07H015-00; C07H015-12; C07H015-22; C07H015-256; C07H017-04; C07H019-04; C07J017-00; C08B015-02; C08B031-18; C08B037-00; C08B037-02; C12N001-20; C12P019-04; C12P019-12; C12P019-14; C12P019-56

ICA A23L001-236; A61K031-70

ICI C12P019:00, C12R001:01; C12P019-00, C12R001:01; C12P019-00, C12R001:01; C12P019-00, C12R001:01

AB EP 599646 A UPAB: 990122

Prodn. of saccharide carboxylic acid (A), or its salts, comprises treating a hydroxymethyl and/or hemiacetal OH-contg. monosaccharide deriv., oligo- or poly-saccharide (or derivs.) with a Pseudogluconobacter microorganism (or derived cell preparation) able to oxidise hydroxymethyl and/or hemiacetal OH-attached C to COOH.

Also new are (1) (A) produced by oxidising at least 1 CH₂OH gp. of palatinose; D-trehalose; maltosyl-beta- cyclodextrin; 2-O-alpha-D-glucopyranosyl-L-ascorbic acid, streptozotocin; heptulose; maltodextrins (I); steviol glycosides (II); validamycin A; mogroside or dextran (including complexes of the acid with a metal salt) or by oxidn. of at least 1 hemiacetal OH-attached C (including complexes of the acid with a metal salt) and (2) prodn. of dextranyl-glucuronic acid-Fe hydroxide complex (III) by reacting dextranyl glucuronic acid with Fe hydroxide sol.

R1 = beta-Glc-2-beta-Glc; beta-Glc(3-beta-Glc)-2-beta-Glc; beta-Glc-2-alpha-Rha; beta-Glc or -beta-Glc(3-beta-Glc)-2-alpha-Rha; R2 = beta-Glc or beta-Glc-2-beta-Glc.

USE/ADVANTAGE - (III), and similar Fe derivs. of dextran carboxylic acid, are useful in Fe supplementation (anti-anaemics) in animals. (A) derived from stevioside glycosides and some other sugars are intense sweeteners (useful in low calorie foods, beverages, etc. and for improving palatability of drugs); those from maltosyl beta-cyclodextrins from clathrates of good water solubility with e.g. prostaglandins, salts of some (A) with Ca, Mg and Fe can be used to improve absorption of these ions (e.g. for preventing osteoporosis); (A) from trehalose are humectants and stabilisers for antibodies; those from D-glucosamine are high moisture retention cosmetic bases, those from nucleosides are flavourings; those from streptozotocin are anticancer and antimicrobial agents; those from Validamycin are agricultural fungicides and those from ascorbic acid are antioxidants. P. saccharoketogenes oxidises a wide range of substrates to (A) with good yield and selectivity. Compared with the sugar starting materials (A) have better solubility, lower toxicity and better resistance to enzymes. They also have good disintegratability and biodegradation.

Dwg.0/14

FS CPI

FA AB; DCN

MC CPI: B02-V; C02-V; B03-F; C03-F; B04-C02; C04-C02; B04-C02C; C04-C02C; D03-G01; D03-H01G; D03-H01P; D03-H01T3; D05-C02; D05-C09; D05-H11; D08-B10; E05-L02A; E07-A02H

DNC C93-122467
 TI Prepn. of neo-trehalose used as a sweetener, taste-improver and stabiliser - comprises treating amylaceous substance in soln. with alpha amylase.
 DC B03 B07 D13 D16 D17 D18 D21 E13
 IN CHAEN, H; MIYAKE, T; SAKAI, S; SHIBUYA, T
 PA (HAYB) HAYASHIBARA SEIBUTSU KAGAKU
 CYC 8
 PI EP 558213 A1 930901 (9335)* EN 16 pp C12P019-12
 R: DE FR GB IT
 JP 05252973 A 931005 (9344) 10 pp C12P019-14
 CA 2089241 A 930826 (9346) C12P019-14
 EP 558213 B1 960626 (9630) EN 16 pp C12P019-12
 R: DE FR GB IT
 DE 69303302 E 960801 (9636) C12P019-12
 US 5578469 A 961126 (9702) 11 pp C12P001-04
 TW 336954 A 980721 (9848) C12P019-12
 ADT EP 558213 A1 EP 93-301059 930215; JP 05252973 A JP 92-93936 920225; CA 2089241 A CA 93-2089241 930210; EP 558213 B1 EP 93-301059 930215; DE 69303302 E DE 93-603302 930215; EP 93-301059 930215; US 5578469 A US 93-22340 930224; TW 336954 A TW 93-100963 930211
 FDT DE 69303302 E Based on EP 558213
 PRAI JP 92-93936 920225
 REP 2.Jnl.Ref
 IC ICM C12P001-04; C12P019-12; C12P019-14
 ICS A23C009-13; A23C009-152; A23G001-00; A23G003-00; A61K038-43; A61K038-46
 AB EP 558213 A UPAB: 931119
 Prepn. of neotrehalose comprises (a) allowing alpha-amylase to act on an amylaceous substance in a soln. to form neotrehalose; and (b) recovering the neotrehalose.
 Also claimed, is a compsn. in which the resultant neotrehalose is incorporated in a prod..
 USE/ADVANTAGE - The neotrehalose has chemical stability as well as other advantageous properties such as sweetness, energy-imparting ability, osmosis-regulating ability, filler-imparting ability, gloss imparting ability, moisture-retaining ability, viscosity-imparting ability, crystallisation preventing ability and non-fermentability. Because of these properties neotrehalose can be advantageously used as a sweetener, taste-improving agents, quality-improving agents and stabiliser in compsns. such as food prods., tobaccos, cigarettes, feeds, pet foods, cosmetics and pharmaceuticals. In the latter neotrehalose can supplement energy to living cells.
 Dwg.0/2
 FS CPI
 FA AB; DCN
 MC CPI: B07-A02; B12-J01; D03-H01A; D03-H01Q; D05-A02C; D05-C08; D06-H; D07-C; D08-B11; E07-A02H
 L169 ANSWER 13 OF 13 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD
 AN 84-240634 [39] WPIDS
 DNC C84-101610
 TI Vinegar prodn. by submerged cultivation - of alcohol-contg. medium or malt medium contg. specified ratio of unfermentable to fermentable sugar.
 DC D13 D16
 PA (QPPP) KEWPIE JYOZO KK; (QPPP) QP CORP; (TOSH-N) TOSHOKU LTD
 CYC 1
 PI JP 59143583 A 840817 (8439)* 6 pp
 JP 04059874 B 920924 (9243) 6 pp C12J001-04

ADT JP 59143583 A JP 83-17459 830207; JP 04059874 B JP 83-17459 830207
 FDT JP 04059874 B Based on JP 59143583
 PRAI JP 83-17459 830207
 IC ICM C12J001-04
 AB JP59143583 A UPAB: 930925

Method comprises fermenting a culture medium contg. alcohol or a malt-medium by submerged culture. The acidity of amino acid and wt. ratio of unfermentable sugar to fermentable sugar in the medium is adjusted to above 2.0 and less than 0.6, respectively.

The culture medium, contains 0-3 % acetic acid and 4-12 % alcohol. In the determ. of the acidity of aminoacid, a sample of the culture medium 10 ml, is neutralised with 1 N sodium hydroxide, neutral formaldehyde 5 ml, is added and titrated with 1/10 N sodium hydroxide. The acidity of amino acid=(the volume of titrant **consumed**) x (factor). Examples of fermentable sugars are glucose, fructose, maltrose, sucrose, and almtotriose, and those of unfermentable sugars are galactose, **trehalose**, maltotetraose, and **dextrin**.

ADVANTAGE - Method suppresses foaming of culture medium, and affords vinegar of good flavour and taste.

0/0

FS CPI

FA AB

MC CPI: D05-C09; D05-G

=> d his 1170-

(FILE 'WPIDS' ENTERED AT 14:05:02 ON 08 FEB 1999)

L170 22 S L149 AND VEGET?

L171 21 S L170 NOT L169

=> d all tot

L171 ANSWER 1 OF 21 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD

AN 98-393775 [34] WPIDS

DNC C98-119628

TI Cleaner compsn. for food. - contains mixture of capric mono glyceride and sucrose fatty carboxylate, builder, hydrotrope and saccharide.

DC D25 E19

PA (DAII) DAIICHI KOGYO SEIYAKU CO LTD

CYC 1

PI JP 10158690 A 980616 (9834)* 5 pp C11D001-66

ADT JP 10158690 A JP 96-321405 961202

PRAI JP 96-321405 961202

IC ICM C11D001-66

ICS C11D003-20; C11D003-22

AB JP10158690 A UPAB: 980826

The compsn. contains 2-10 wt. % the mixt. of capric mono-glyceride and sucrose 12-18C fatty carboxylate, 1-20 wt. % builder, 20-40 wt. % hydrotrope and 20-50 wt. % saccharide.

USE - The cleaner is used for **vegetables**, fruits, marine foods, cooking utensils, dishes, food processing equipments and food production machines.

ADVANTAGE - The compsn. shows the low toxicity, the high detergency and the improved storage stability at the wide range of temp..

Dwg.0/0

FS CPI

FA AB; DCN

MC CPI: D11-A03A; D11-B03; D11-D01A; D11-D01B; E07-A02A; E10-E04G

L171 ANSWER 2 OF 21 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD
 AN 98-163769 [15] WPIDS
 DNC C98-052935
 TI Aqueous liquid cleaner product for cooking utensils - containing permeation volatilisation preventive obtained from telomers of linear or cyclic polyhydric alcohol.
 DC A97 D25 E19
 PA (LIOY) LION CORP
 CYC 1
 PI JP 10030100 A 980203 (9815)* 11 pp C11D017-08
 ADT JP 10030100 A JP 96-295785 961017
 PRAI JP 96-145047 960515
 IC ICM C11D017-08
 ICS C11D003-20; C11D017-04
 AB JP10030100 A UPAB: 980410
 The cleaning composition contains 0.1-10 wt.% of at least one or more permeation volatilisation preventive(s) chosen from the monomers or telomers of linear or cyclic polyhydric alcohol containing 2-6 OH groups, filled in a plastic bottle with a thickness of 150-220 microns.
 USE - Used in aqueous liquid cleaners for **vegetables**, fruit, tableware and cooking utensils.
 ADVANTAGE - The polyhydric preventive lowers the permeable and volatile loss of the components in the composition filled in the thin wall plastic bottle.
 Dwg.0/0
 FS CPI
 FA AB; DCN
 MC CPI: A12-P06A; D11-D01A; D11-D07; E10-A07; E10-E04H; E10-E04J

L171 ANSWER 3 OF 21 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD
 AN 97-539636 [50] WPIDS
 DNC C97-172785
 TI Preserving freshness of cut **vegetables** - comprises contacting cut **vegetables** with aqueous solution containing ethyl alcohol, **trehalose** and vitamin-C.
 DC D13
 PA (HAYB) HAYASHIBARA SEIBUTSU KAGAKU; (KYOK-N) KYOKUTO INT KK
 CYC 1
 PI JP 09224565 A 970902 (9750)* 4 pp A23B007-153
 ADT JP 09224565 A JP 96-37636 960226
 PRAI JP 96-37636 960226
 IC ICM A23B007-153
 AB JP09224565 A UPAB: 971217
 Preserving freshness of cut **vegetables** comprises contacting cut **vegetables** with an aqueous solution containing 0.8-1.5 wt.% ethyl alcohol, 0.1-5 wt.% **trehalose** and 0.005-0.3 wt.% vitamin C.
 ADVANTAGE - Cut **vegetables** are economically and easily preserved for at least 5 days.
 Dwg.0/0
 FS CPI
 FA AB
 MC CPI: D03-H02E

L171 ANSWER 4 OF 21 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD
 AN 97-530102 [49] WPIDS
 DNC C97-168860
 TI Freshness-keeping agent for cut **vegetables** and fruits -

comprises water diluted mixture of ethyl alcohol, **trehalose** and vitamin-C.

DC D13
PA (HAYB) HAYASHIBARA SEIBUTSU KAGAKU; (KYOK-N) KYOKUTO INT KK
CYC 1
PI JP 09252719 A 970930 (9749)* 5 pp A23B007-153
ADT JP 09252719 A JP 96-64161 960321
PRAI JP 96-64161 960321
IC ICM A23B007-153
AB JP09252719 A UPAB: 971211

Cut **vegetables** and fruit are contacted with a water-diluted mixture of:

- (i) 20-62(w/w)% ethyl alcohol,
- (ii) 2.5-20% **trehalose**,
- (iii) 0.1-0.5% vitamin C, and
- (iv) water by immersion, etc.

USE - Used to reduce the cost of maintenance of the freshness.

ADVANTAGE - The agent is easily handled and used, and can maintain the freshness for 5 days or longer.

Dwg.0/0

FS CPI
FA AB
MC CPI: D03-A04; D03-H02E

L171 ANSWER 5 OF 21 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD

AN 97-444036 [41] WPIDS

DNC C97-141813

TI Insect pest attractant - comprises gel composition containing cellulose especially useful against cockroaches.

DC C03
PA (EART) EARTH SEIYAKU KK
CYC 1

PI JP 09202701 A 970805 (9741)* 6 pp A01N025-04
ADT JP 09202701 A JP 96-10159 960124
PRAI JP 96-10159 960124
IC ICM A01N025-04

ICS A01N025-10; A01N059-14

AB JP09202701 A UPAB: 971013

Insect pest attractant comprises a gel composition having a sugar degree of 50-80 % for the whole of gel composition and containing cellulose.

Also claimed is cockroach attractant which comprises a gel composition having a sugar degree of 50-80 % for the whole of gel composition and containing cellulose.

Cockroaches inhibitor containing cockroaches attractant and cockroaches inhibiting component. The sugar content to be contained is fruit juice, honey, molasses, maltitose, sucrose, sugar cane, palatinose and **trehalose**. The sugar degree is 50-80 %, preferably 60-80 %, more preferably 70-80 %. Gelling agent is pectin, agar, gelatin, gelatin gum, and sodium alginate. Amount of the gelling agent to be added is 0.1-30 wt. % in case of agar. Cellulose is rice powder, wheat powder, sweet potato powder, **vegetable** powder, etc. Amount of the cellulose to be added is 0.1-10 wt. %, preferably 0.5-5 wt. %.

USE - The composition is useful as an insect pest attractant, especially cockroaches attractant.

ADVANTAGE - The composition provides excellent attractive effect against insect pest, especially cockroaches.

In an example, Formulation No. 1 (sugar 50 wt. %, sweet potato powder 3 wt. %, curdlan (sic) 3 wt. %): (sugar degree 55 %); Formulation No. 2 (millet jelly 70 wt. %, sweet potato powder 3 wt. %, collagen (sic) 3 wt. %).

%) : (sugar degree 65 %).

Dwg.0/0

FS CPI

FA AB; DCN

MC CPI: C04-C02A; C04-C02D; C04-N02; C07-A02B; C10-A07; C14-B06

L171 ANSWER 6 OF 21 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD

AN 96-487162 [49] WPIDS

DNC C96-152636

TI High **trehalose** content syrup free of crystallisation - contg. other dissolved saccharide(s), used in food prods., tobacco, cosmetics and pharmaceuticals.

DC B03 D13 D16 D21 E13

IN MIYAKE, T; OKADA, K; SHIBUYA, T

PA (HAYB) HAYASHIBARA SEIBUTSU KAGAKU

CYC 4

PI EP 739986 A1 961030 (9649)* EN 19 pp C12P019-12

R: DE FR GB

JP 08336363 A 961224 (9710) 12 pp A23L001-09

ADT EP 739986 A1 EP 96-302590 960412; JP 08336363 A JP 96-112159 960410

PRAT JP 95-110291 950412

REP 1.Jnl.Ref ; EP 704531; JP 62257346

IC ICM A23L001-09; C12P019-12

ICS A23L003-00; C07H001-08; C07H003-04; C12N009-90; C13K013-00

ICA A21D002-18; A23C009-13; A23F005-24; A23G003-00; A23L001-06; A23L001-19;

A23L001-20; A23L001-31; A23L001-337; A61K007-00; A61K007-16;

A61K007-42; A61K007-48; A61K009-06; A61K047-26

AB EP 739986 A UPAB: 961205

High **trehalose** content syrup free of crystallisation comprises **trehalose** dissolved in an amt. of above its water solubility and other dissolved saccharide(s). Also claimed is a compsn. comprising 0.5 w/w% of the above syrup contg. the other saccharide(s) in at least the same amt. of the **trehalose**.

USE - The syrup is used as a sweetener, taste improving agent, quality improving agent, stabiliser and filler in food prods., animal feeds, pet foods, cosmetics, pharmaceuticals, tobaccos, cigarettes, dentifrices, cod liver oils in the form of a drop and troches. The syrup is pref. used in Japanese and western confectionery, processed meat, fruit and **vegetables** and soft drinks.

ADVANTAGE - The syrup is easily handled and free of crystallisation at <10deg.C. The syrup has a lower DE than conventional starch sugars, pref. a DE of C50 and has relatively low viscosity and high sweetening power. The syrup has osmotic controlling, filler imparting, gloss imparting, moisture retaining, viscosity imparting, and crystallisation preventing activity for other saccharides, non-fermentability and retrogradation preventing activity. The syrup mixes well with other materials having sour-, acid-, salty-, bitter-, astringent- and good-taste and has high acid and heat tolerance. The syrup is free of bacterial contamination at ambient temp., stable and may be stored in tanks and transported by pumps and tank trucks. The syrup does not require a dissolving step.

Dwg.0/0

FS CPI

FA AB; DCN

MC CPI: B07-A02B; B14-E11; B14-R01; D03-G01; D03-H01A; D05-A01A1; D05-C08; D07-D; D08-B; E07-A02H

L171 ANSWER 7 OF 21 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD

AN 96-078603 [09] WPIDS

DNC C96-026106
 TI Prepn. of the saccharide **trehalose** - using a maltose-
trehalose conversion enzyme derived from microorganisms.
 DC B03 D13 D16 D17 D21 E13
 IN CHAEN, H; MIYAKE, T; NISHIMOTO, T; SUGIMOTO, T; NISHIMOTO, T
 PA (HAYB) HAYASHIBARA SEIBUTSU KAGAKU
 CYC 5
 PI EP 693558 A1 960124 (9609)* EN 49 pp C12P019-12
 R: DE FR GB
 JP 09009986 A 970114 (9712) 29 pp C12P019-16
 US 5747300 A 980505 (9825) C12P019-04
 US 5759610 A 980602 (9829) C12P019-12
 ADT EP 693558 A1 EP 95-304991 950718; JP 09009986 A JP 95-204033 950719; US
 5747300 A Div ex US 95-503426 950717, US 96-620172 960322; US 5759610 A
 Cont of US 95-503426 950717, US 97-815679 970312
 PRAI JP 95-120387 950424; JP 94-187901 940719
 REP EP 532807; EP 555540; EP 606753; FR 2671099
 IC ICM C12P019-04; C12P019-12; C12P019-16
 ICS A23G003-00; A23L001-09; A23L001-236; A61K007-00; A61K031-70;
 C07H003-00; C07H003-04; C12N009-24; C12P019-18; C12P019-20
 ICI C12P019 12, C12R001:38
 AB EP 693558 A UPAB: 960305
 New method of obtaining **trehalose** (T) or a saccharide contg. it
 in which a microorganism that produces maltose/**trehalose**
 conversion enzyme is cultured in a nutrient culture medium. Also claimed
 are: (i) a process for producing and collecting (T); and (ii) a compsn.
 contg. (T).
 USE - (T) prevents browning and deterioration of substances as it is
 a non-reducing saccharide. As such it may be used as a coating agent for
 tablets in combination with binders. It may be used as a sweetener alone
 or in conjunction with other sweeteners and/or fillers in, e.g. biscuits,
 chocolate, sponge cakes, syrups, jams, preserved fruits and
vegetables, dairy prods. and alcoholic and soft drinks. (T) may be
 used to improve the taste quality of animal feeds and also be used in
 toiletries and cosmetics such as dentifrice and medicines as a quality
 improver or stabiliser for e.g. vaccines and antibiotics.
 ADVANTAGE - The process results in increased yield of (T) making it
 suitable for use in industrial scale prodn.
 Dwg.0/12
 FS CPI
 FA AB; DCN
 MC CPI: B07-A02; B10-A07; B14-R01; D03-A; D03-B; D03-E07; D03-G; D03-H;
 D03-H01A; D03-H01S; D03-H02; D05-E; D05-H07; D06-H; D06-H01; D08-A;
 D08-B; D08-B08; D08-B11; E07-A02H
 L171 ANSWER 8 OF 21 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD
 AN 95-366648 [48] WPIDS
 DNC C95-159599
 TI Protective compsn. for cells, animal and **vegetable** tissues and
 cosmetic prepn. - contg. trealose di saccharide.
 DC B03 C02 D16 D21 E13
 IN PANEK, A D
 PA (UYRI-N) UNIV RIO DE JANEIRO
 CYC 1
 PI BR 9400068 A 950926 (9548)* 1 pp C12N001-16
 ADT BR 9400068 A BR 94-68 940111
 PRAI BR 94-68 940111
 IC ICM C12N001-16
 ICS A01N001-02; A61K007-48; C12N005-04; C12N005-06

AB BR 9400068 A UPAB: 960108
Protective compsns. are based on the disaccharide trealose, widely used in fermentation processes, biomass prodn. and medical, pharmaceutical, agricultural and cosmetic research.

USE - The compsns. are useful for the protection and maintenance of human tissues.

ADVANTAGE - Cell viability and integrity is maintained under stress, e.g. thermal and osmotic shock, freezing, dehydration and prolonged exposure to alcohol.

Dwg.0/1

FS CPI

FA AB; DCN

MC CPI: B07-A02B; C07-A02B; D05-C13; D05-H01; D05-H08; D08-B; E07-A02H

L171 ANSWER 9 OF 21 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD

AN 95-139974 [19] WPIDS

DNC C95-064686

TI Prepn. of saccharomyces cerevisiae bacteria - has glycine addn. protecting **vegetables** against extreme temp. after extraction. of tri chloro acetic acid.

DC B04 C06 D16

IN MARTINS, MELEIRO C R; PANEK, A D; PASCHOALIN, V M F

PA (UYRI-N) UNIV RIO DE JANEIRO

CYC 1

PI BR 9303490 A 950328 (9519)* 1 pp C12P009-12

ADT BR 9303490 A BR 93-3490 930826

PRAI BR 93-3490 930826

IC ICM C12P009-12

ICS C12R001-865

AB BR 9303490 A UPAB: 950524

The preparation of Saccharomyces cerevisiae bacteria comprises refining of bacterial disaccharide accumulated intracellularly by cells of Saccharomyces cerevisiae. Glycose addition and heat treatment at 40 o.C of the cells of stock 50613 has extraction by 0.5 M trichloroacetic acid.

USE - In industry, research agriculture medicine, etc.

ADVANTAGE - The product acts as an osmosis regulator and permits conservation of transplant organs.

Dwg.0/0

FS CPI

FA AB; DCN

MC CPI: B04-F09C; C04-F09C; B04-L01; C04-L01; B12-M06; C12-M06; D05-H04

L171 ANSWER 10 OF 21 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD

AN 94-299626 [37] WPIDS

DNC C94-136527

TI Freshness preservatives for cut flowers and leafy **vegetables** - comprising aq. soln. or powder of **trehalose** blended with fungicides, amino acids pref. norleucine, nutrients or growth regulators.

DC E13 G04

PA (AJIN) AJINOMOTO KK

CYC 1

PI JP 06227904 A 940816 (9437)* 5 pp A01N003-02

ADT JP 06227904 A JP 93-12132 930128

PRAI JP 93-12132 930128

IC ICM A01N003-02

AB JP06227904 A UPAB: 941109

Preservatives contain **trehalose** as an active ingredient.

The preservatives are applied by immersing the cut ends of flowers in an aq. soln. contg. **trehalose**, spraying the aq. soln. contg.

trehalose onto cut flowers or immersing or spraying leafy **vegetables** in the aq. soln. contg. **trehalose**.

Concentration of **trehalose** is 0.001-3 wt.%, pref. 0.01-1.0 wt.%.

USE - Used as freshness preservatives for cut flowers and leafy **vegetables**.

Dwg.0/0

FS CPI
FA AB; GI; DCN
MC CPI: E07-A02H; G04-B

L171 ANSWER 11 OF 21 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD

AN 94-169810 [21] WPIDS

DNC C94-077621

TI Stable compsn. comprising a fat emulsion of fat microparticles - is useful for the delivery of fat-soluble medicinal cpds..

DC B05

IN ISHIKAWA, S; MATSUDA, S; OHASHI, M; SUZUKI, A; TSUJIHARA, K

PA (TANA) TANABE SEIYAKU CO

CYC 6

PI EP 599543 A1 940601 (9421)* EN 11 pp A61K009-107

R: DE FR GB IT

JP 06157294 A 940603 (9427) 7 pp A61K009-107

EP 599543 B1 961002 (9644) EN 12 pp A61K009-107

R: DE FR GB IT

DE 69305144 E 961107 (9650) A61K009-107

US 5650172 A 970722 (9735) 7 pp A61K009-14

ADT EP 599543 A1 EP 93-309195 931118; JP 06157294 A JP 92-310621 921119; EP 599543 B1 EP 93-309195 931118; DE 69305144 E DE 93-605144 931118, EP 93-309195 931118; US 5650172 A Cont of US 93-154434 931119, US 95-479143 950607

FDT DE 69305144 E Based on EP 599543

PRAI JP 92-310621 921119

REP EP 325244; EP 331755; EP 355604

IC ICM A61K009-107; A61K009-14

ICS A61K009-10; A61K009-16; A61K047-12; A61K047-18; A61K047-26

AB EP 599543 A UPAB: 940715

A compsn. for use as a drug carrier comprises a fat emulsion of fat microparticles and also contains a stabilising agent consisting of a fatty acid, a basic amino acid and a saccharide.

The compsn. may also contain a fat-soluble medicinal cpd. The fatty acid pref. has 6-32C and is oleic acid, linoleic acid myristic acid, stearic acid, palmitic acid or behenic acid. The basic amino acid (0.05 to 4 parts. by wt.) is lysine, histidine, ornithine or arginine. The saccharide (2 to 80 parts by wt.) is a mono- or di-saccharide, esp. glucose, fructose, maltose, lactose, sucrose or **trehalose**. The fat microparticles have a mean dia. of at most 100 nm. The compsn. can be in lyophilised form.

USE/ADVANTAGE - The compsn. is useful for the delivery of fat soluble medicinal cpds. (e.g. antiinflammatory agents (indomethacin), platelet aggregation inhibitors, fibrinolysis-promoting agents, antitumour agents (fluorouridine derivs.) and fat-soluble vitamins (tocopherol acetate)). The small particle size prevents the fat particles being taken up by the liver and spleen and therefore the medicinal cpd. is available systemically. Prior art small particles have not been stable to long term storage. The novel compsn. consists of a stabilised emulsion which can be stored for a long time in a lyophilised form.

Dwg.0/0

FS CPI

FA AB; DCN
MC CPI: B07-A02B; B10-A07; B10-B02E; B10-B02J; B10-C04E

L171 ANSWER 12 OF 21 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD

AN 93-134606 [16] WPIDS

DNN N93-102566 DNC C93-060146

TI Unit-of-use reagent compsn. for immunoassay storable at room temp. -
comprise reagent mixt. encapsulated in mouldable carrier matrix which is
dried to stabilise reagent coated particle.

DC B04 S03

IN DEVEREAUX, S M

PA (ABBO) ABBOTT LAB

CYC 17

PI WO 9307466 A1 930415 (9316)* EN G01N021-00

RW: AT BE CH DE DK ES FR GB GR IE IT LU MC NL SE

W: CA JP

EP 607209 A1 940727 (9429) EN G01N021-00

R: DE ES FR IT

JP 07500417 W 950112 (9511) G01N033-543

EP 607209 A4 970122 (9722) G01N021-00

ADT WO 9307466 A1 WO 92-US7934 920922; EP 607209 A1 EP 92-920645 920922, WO
92-US7934 920922; JP 07500417 W WO 92-US7934 920922, JP 93-506927 920922;
EP 607209 A4 EP 92-920645

FDT EP 607209 A1 Based on WO 9307466; JP 07500417 W Based on WO 9307466

PRAI US 91-774688 911011

REP US 3963441; US 3975162; US 5102788; 1.Jnl.Ref ; DE 3928568; EP 140489; EP
141648; JP 63106562; US 4356149

IC ICM G01N021-00; G01N033-543

ICS G01N033-531; G01N033-544

AB WO 9307466 A UPAB: 930924

A unit-of-use reagent compsn. for a specific binding assay comprises (a)
at least one capture-reagent-coated particle, in which the capture reagent
(I) is a specific binding member, in a amt. sufficient to perform a single
binding assay; and (b) a mouldable carrier matrix (II) which is dried,
stabilising the (I)-coated particle (II) is reconstituted on contact with
a solvent thus exposing the (I)-coated particle for a specific binding
reaction.

Prepn. of the compsn. by (i) combining at least one (I)-coated
particle with (II); (ii) dispersing an aliquot of the mixt. into a mould
cavity; (iii) cooling the mixt to form a unit-of-use reagent compsn.; and
(iv) lyophilising the compsn. Pref. (II) is a gelatin, pref. calf or swine
skin gelatin, fish gelatin or **vegetable** gelatin. The compsn.
pref. also includes a stabiliser for the indicator reagent, pref. a sugar
such as **trehalose**, dextran, lactose, maltose, xylose, arabitol,
xylitol or sucrose.

USE/ADVANTAGE - Compsn. is esp. suited for use in an immunoassay
format. Examples are given of to use for detection of Carcinoembryonic
antigen (CEA) and human chorionic gonadotrophin (hCG) by enzyme
immunoassay. (II) is used to dispense the reagent compsn. in the amt.
needed for a single assay. Lyophilisation extends the reagent stability and
facilitates handling and packaging, as it obviates the need for cold
storage. Compsn. can be stored for prolonged periods at room temp. and can
be dispensed by a technician without the need for multiple reagent
measurements and addns. to the reaction vessel or test device.

0/0

FS CPI EPI

FA AB; DCN

MC CPI: B04-B02C; B04-B02D4; B04-B04A; B04-B04C2; B04-C02D; B11-C07A1;
B12-K04A

EPI: S03-E14H4

L171 ANSWER 13 OF 21 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD
 AN 93-134602 [16] WPIDS
 DNN N93-102562 DNC C93-060142
 TI Unit-of-use reagent compsn. for immunoassays, storable at room temp. -
 comprises reagent mixt. incorporated in porous material encapsulated in
 carrier matrix which is lyophilisable to stabilise indicator reagent.
 DC B04 S03
 IN DEVEREAUX, S M; DEVEREAUX, S M
 PA (ABBO) ABBOTT LAB
 CYC 17
 PI WO 9307461 A2 930415 (9316)* EN 23 pp G01N000-00
 RW: AT BE CH DE DK ES FR GB GR IE IT LU MC NL SE
 W: CA JP
 EP 609265 A1 940810 (9431) EN G01N033-52
 R: DE ES FR IT
 EP 609265 A4 941221 (9543) G01N000-00
 EP 609265 B1 970528 (9726) EN 13 pp G01N033-543
 R: DE ES FR IT
 DE 69220080 E 970703 (9732) G01N033-543
 ES 2103969 T3 971001 (9746) G01N033-543
 ADT WO 9307461 A2 WO 92-US7927 920922; EP 609265 A1 EP 92-920799 920922, WO
 92-US7927 920922; EP 609265 A4 EP 92-920799 ; EP 609265 B1 EP
 92-920799 920922, WO 92-US7927 920922; DE 69220080 E DE 92-620080 920922,
 EP 92-920799 920922, WO 92-US7927 920922; ES 2103969 T3 EP 92-920799
 920922
 FDT EP 609265 A1 Based on WO 9307461; EP 609265 B1 Based on WO 9307461; DE
 69220080 E Based on EP 609265, Based on WO 9307461; ES 2103969 T3 Based on
 EP 609265
 PRAI US 91-776518 911011
 REP No-SR.Pub ; EP 214053; EP 62968; US 3963441; US 3975162; US 5102788
 IC ICM G01N000-00; G01N033-52; G01N033-543
 ICS G01N033-548
 AB WO 9307461 A UPAB: 930924
 A unit- of- use reagent compsn. for a specific binding assay comprises (a)
 porous material (I); (b) indicator reagent (II) comprising a labelled
 specific binding member in an amt. sufficient to perform a single binding
 assay; and (c) carrier matrix (III) which is lyophilisable and so
 stabilises (II). (III) rehydrates on contact with a solvent and exposing
 or releasing the assay reagent from (I) for a specific binding reaction.
 Prepn. of the compsn. is by (i) combining (II) with a (III) soln.;
 (ii) dispersing an aliquot of the mixt. onto (I); (iii) cooling (I) to
 form a unit-of-use reagent compsn.; and (iv) lyophilising the compsn.
 which rehydrates on contact with a solvent, thus exposing (II) for a
 specific binding reaction.
 Pref. (III) is a gelatin, pref. calf skin gelatin, fish gelatin,
 swine skin gelatin or **vegetable** gelatin. Compsn. pref. also
 includes a stabiliser for (II), pref. a sugar e.g, **trehalose**,
 dextran, lactose, maltose, xylase, arabitol, xylitol or sucrose.
 USE/ADVANTAGE - Esp. for use in an immunoassay formation. Examples
 are given of its use for detection of carcinoembryonic antigen (eEA) and
 human chorionic gonadotrophin (hCB) by enzyme immunoassay. (III) is used
 to dispense the reagent compsn. in the amt. needed for a single assay,
 Lyophilisation extends the reagent stability and facilitates handling and
 packaging, as it obviates the need for cold storage. Compsn. can be stored
 for prolonged periods at room temp. and can be dispensed by a technician
 without the need for multiple reagent measurements and addns. to the
 reaction vessel or test device.

0/0
 FS CPI EPI
 FA AB; DCN
 MC CPI: B04-B02C2; B04-B02D4; B04-B04A; B04-B04C2; B04-C02D; B11-C07B1;
 B12-K04A
 EPI: S03-E14H; S03-E14H4

L171 ANSWER 14 OF 21 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD
 AN 92-007197 [01] WPIDS
 CR 94-135190 [16]
 DNC C92-003071
 TI Self-emulsifying compsns. - comprises oleaginous material and
 water-soluble matrix.
 DC A96 A97 B07 D13 D21
 IN SHIVELY, M L
 PA (RESE) RESEARCH CORP TECHNOLOGIES INC
 CYC 19
 PI WO 9118613 A 911212 (9201)*
 RW: AT BE CH DE DK ES FR GB GR IT LU NL SE
 W: AU CA JP US
 AU 9182106 A 911231 (9215)
 EP 489898 A1 920617 (9225) EN 111 pp A61K031-74
 R: AT BE CH DE DK ES FR GB GR IT LI LU NL SE
 AU 648573 B 940428 (9422) A61K009-113
 JP 06165931 A 940614 (9428)# 32 pp B01J013-00
 JP 06182189 A 940705 (9431)# 32 pp B01J013-00
 JP 07501259 W 950209 (9515) B01J013-00
 IE 62921 B 950308 (9520) A61K031-74
 EP 489898 A4 930609 (9526)

ADT EP 489898 A1 EP 91-912696 910531, WO 91-US3864 910531; AU 648573 B AU
 91-82106 910531; JP 06165931 A JP 92-82388 920403; JP 06182189 A JP
 92-81184 920402; JP 07501259 W JP 91-511745 910531, WO 91-US3864 910531;
 IE 62921 B IE 91-1901 910604; EP 489898 A4 EP 91-912696

FDT EP 489898 A1 Based on WO 9118613; AU 648573 B Previous Publ. AU 9182106,
 Based on WO 9118613; JP 07501259 W Based on WO 9118613

PRAI US 90-531847 900601; JP 92-82388 920403; JP 92-81184 920402

REP 1.Jnl.Ref ; US 2861920; US 3136692; US 3145146; US 3148127; US 4199564; US
 4963385; WO 9006969; No-Citns.

IC ICM A61K009-113; A61K031-74; B01J013-00
 ICS A23D007-00; A23D009-04; A23L001-035; A61K007-00; A61K009-107;
 A61K047-26; A61K047-32; A61K047-36; B01F017-00

AB WO 9118613 A UPAB: 950609
 Compsns. described as self-emulsifying glasses comprise a mixt. of an
 oleaginous material (I) and a non-surface-active water-soluble matrix cpd.
 (II), the compsns. being capable of forming stable emulsions on contact
 with aq. media. The compsns. are further defined as being 10-60%
 microcrystalline. In other embodiments, they are further defined by the
 nature of (II).
 (I) is (a) a mineral, **vegetable**, animal or fish oil or
 perfluorodecalin, or (b) a w/o emulsion. (II) is sucrose,
trehalose, fructose, a cyclamate, saccharin, maltodextrin,
 polyvinylpyrrolidone or a cellulose deriv. The (II):(I) wt. ratio is
 2-20:1.
 The compsns. are prep'd. by mixing (I) and (II) with sufficient
 solvent (esp. H2O) to dissolve (II), and then removing the solvent, pref.
 by evapn. in vacuo.
 USE/ADVANTAGE - The compsns. may be used as carriers for water-or
 oil-soluble pharmaceuticals, blood substits., food additives or cosmetic
 components. The compsns. contain no prim. surfactant thus avoiding

possible toxic, irritant or allergic effects. @ (111pp Dwg.No.0/5)@
0/5@

FS CPI
FA AB; DCN
MC CPI: A12-V01; A12-V02; A12-V04; A12-W09; B04-B01C; B04-C02A; B04-C02B;
B04-C03A; B06-F01; B07-A02; B10-A07; B10-A08; B12-J01; B12-L02;
D03-H01; D08-B; D09-C01

L171 ANSWER 15 OF 21 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD

AN 89-150625 [20] WPIDS

DNC C89-066681

TI Sustained-release formulation of water-soluble drug - contains an oily medium and a surfactant with HLB below 5.

DC A96 B07

IN IWATA, M; KOJIMA, K; TANAKA, T

PA (DAIN) DAINIPPON PHARM CO LTD

CYC 13

PI WO 8903671 A 890505 (8920)* JA 22 pp

RW: AT BE CH DE FR GB IT LU NL SE

W: JP KR US

ADT WO 8903671 A WO 88-JP1090 881027

PRAI JP 87-274345 871029; JP 88-227329 880909

REP 1.Jnl.Ref ; AT 344327; CA 1050426; DE 2641819; DK 431876; FR 2371926; GB 1563311; JP 48088220; JP 52044222; JP 52087218; JP 55081812; JP 61050923; JP 62032887

IC A61K009-10

AB WO 8903671 A UPAB: 930923

Formulation contains a water-soluble drug together with a surfactant (hydrophilic/lipophilic balance, HLB, below 5, pref. below 4) and an oily medium. It may also contain a stabiliser and a release control agent. Pref. the surfactant is a sorbitan fatty acid ester such as sorbitan sesquioleate; the oily medium is a **vegetable** oil (such as soybean oil) or tocopherol acetate; the stabiliser is gelatin, albumin, dextran or **trehalose**; the release control agent is egg yolk lecithin, cholesterol or polyoxyethylene-hardened corn oil.

The drug is finely powdered, and mixed with a suspension of the surfactant in the oily medium.

USE/ADVANTAGE - Use of the formulation produces a steady concentration of the drug in blood or lymph over a long period. It is suitable for drugs such as tumour necrosis factor, human interleukin 1-alpha, colony stimulating factor and mitomycin C.

0/2

FS CPI

FA AB; DCN

MC CPI: A12-V01; B02-M; B03-H; B04-B01C1; B04-B04J; B04-C01G; B07-A02; B12-M10A

L171 ANSWER 16 OF 21 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD

AN 89-001829 [01] WPIDS

DNC C89-000683

TI Dehydrating food or beverage at raised temp. - with addn. of **trehalose**, to prevent denaturation of protein.

DC D13

IN ROSER, B J

PA (QUAD-N) QUADRANT BIORESOURCES LTD; (QUAD-N) QUADRANT BIORES

LTD

CYC 27

PI GB 2206273 A 890105 (8901)* 17 pp

WO 8900012 A 890112 (8905) EN

W: AU DK FI HU JP NO SU US

ZA 8804617 A 890329 (8919)
 AU 8819882 A 890130 (8920)
 NO 8900821 A 890529 (8927)
 DK 8900923 A 890227 (8931)
 FI 8900935 A 890227 (8940)
 CN 1030343 A 890118 (8950)
 HU 50603 T 900328 (9019)
 JP 02503864 W 901115 (9101)
 NO 172964 B 930628 (9101)
 GB 2206273 B 910327 (9113)
 US 5026566 A 910625 (9128)
 IL 86903 A 911212 (9203)
 EP 297887 B 920422 (9217) EN 5 pp

R: AT BE CH DE ES FR GR IT LI LU NL SE

DE 3870332 G 920527 (9223) A23L001-30
 CS 8804627 A2 920219 (9237) A23L002-08
 ES 2032968 T3 930301 (9321) A23L001-30
 JP 05081232 B 931111 (9348) 5 pp A23L003-42
 SU 1816199 A3 930515 (9430) 5 pp A23L003-42
 CA 1332033 C 940920 (9438) A23L001-30
 FI 94826 B 950731 (9536) # A23L003-42

ADT GB 2206273 A GB 88-15472 880629; WO 8900012 A WO 88-GB511 880629; ZA 8804617 A ZA 88-4617 880628; JP 02503864 W JP 88-505533 880629; NO 172964 B WO 88-GB511 880629; NO 89-821 890227; US 5026566 A US 89-327187 890501; EP 297887 B EP 88-305979 880629; DE 3870332 G DE 88-3870332 880629, EP 88-305979 880629; CS 8804627 A2 CS 88-4627 880629; ES 2032968 T3 EP 88-305979 880629; JP 05081232 B JP 88-505533 880629, WO 88-GB511 880629; SU 1816199 A3 WO 88-GB511 880629, SU 89-4613801 890227; CA 1332033 C CA 88-570638 880628; FI 94826 B WO 88-GB511 880629, FI 89-935 890227

FDT NO 172964 B Previous Publ. NO 8900821; DE 3870332 G Based on EP 297887; ES 2032968 T3 Based on EP 297887; JP 05081232 B Based on JP 02503864, Based on WO 8900012; FI 94826 B Previous Publ. FI 8900935

PRAI GB 87-15238 870629; GB 88-15472 880629; FI 89-935 890227

REP EP 211257; US 3162540; US 3170804; WO 8601103

IC ICM A23L001-30; A23L002-08; A23L003-42

ICS A23B004-03; A23B005-02; A23B007-02; A23B007-022; A23C009-18; A23D000-00; A23F005-40; A23L003-40

ICA A23C001-16; A23L001-32; A23L002-16

AB GB 2206273 A UPAB: 940120

When drying a food or beverage contg. water, at above ambient temp., **trehalose** is incorporated into the food or beverage.

The concn. of **trehalose** is pref. 0.5-15 wt.%. If the food is proteinaceous, the ratio by wt. of **trehalose**:protein is 1:2.5-15 (1:2.5-7.5).

USE/ADVANTAGE - Protein in the food or beverage is protected from denaturation, and the reconstituted food more closely resembles the original. The speed of re-hydration is greater. The food or beverage comprises milk or egg, or is a juice, juice concentrate, paste or puree of fruit or **vegetable** (claimed).

Dwg.0/0

FS CPI

FA AB

MC CPI: D03-H01L

L171 ANSWER 17 OF 21 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD

AN 87-293728 [42] WPIDS

CR 89-115837 [16]

DNC C87-124678

TI Immunological adjuvant enhancing immune response to vaccine antigens - comprises lipid emulsion contg. metabolisable oil, low mol. wt. poly ol and lecithin, and refined detoxified bacterial adjuvant.

DC B04 C03 D16

IN CANTRELL, J L

PA (RIBI-N) RIBI IMMUNOCHEM RES INC; (RIBI-N) RIBI IMMUNOCHEM RES

CYC 12

PI GB 2189141 A 871021 (8742)* 6 pp
 DE 3712767 A 871022 (8743)
 AU 8771566 A 871022 (8749)
 FR 2596990 A 871016 (8749)
 FR 2598622 A 871120 (8803)
 JP 63010736 A 880118 (8808)
 US 4806352 A 890221 (8910) 5 pp
 ES 2005166 A 890301 (8939)
 ES 2005167 A 890301 (8939)
 GB 2189141 B 900725 (9030)
 DE 3712767 C 910627 (9126)
 IT 1205819 B 890331 (9129)
 JP 04001728 B 920114 (9206)
 CA 1300503 C 920512 (9225) A61K039-39

ADT GB 2189141 A GB 87-9023 870415; DE 3712767 A DE 87-3712767 870415; FR 2596990 A FR 86-5252 860415; FR 2598622 A FR 87-5271 870414; JP 63010736 A JP 87-92947 870415; US 4806352 A US 86-852120 860415; ES 2005166 A ES 87-1112 870415; ES 2005167 A ES 87-1113 870415; JP 04001728 B JP 87-92547 870415; CA 1300503 C CA 87-534735 870415

PRAI US 86-852120 860415; US 87-102909 870930

IC ICM A61K039-39
 ICS A61K009-10; A61K035-74; A61K045-05; C12N000-00

AB GB 2189141 A UPAB: 950126
 Immunological adjustment comprises: (1) a lipid emulsion system contg. (a) a metabdisable oil, (b) a low mol. wt. polyol and (c) lecithin; and (2) a refined, detoxified bacterial adjustment. Also claimed is an adjuvant system contg. an antigen and the immunological adjuvant.
 USE/ADVANTAGE - The adjuvant is useful in vaccines and greatly enhances the immune response against a wide variety of natural and synthetic antigens, including viral, bacterial, fungal and protozoal antigens. The antigens may be genetically engineered proteins or in vitro synthesised peptides, e.g. related to viral components; natural proteins such as bacterial toxoids; capsule polysaccharides; inactivated whole bacteria, viruses, fungi, etc. The metabolisable emulsion does not induce a granulomatous response and is less expensive than prior W/O emulsions.
 Dwg./0
 Dwg./0

FS CPI

FA AB; DCN

MC CPI: B02-V02; B04-B01B; B04-B01C1; B04-B01C3; B04-B02B1; B04-B04C1; B05-B01P; B12-A01; B12-A02C; B12-A06; B12-B01; C02-V02; C04-B01B; C04-B01C1; C04-B01C3; C04-B02B1; C04-B04C1; C05-B01P; C12-A01; C12-A02C; C12-A06; C12-B01; D05-H07

L171 ANSWER 18 OF 21 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD

AN 87-291642 [41] WPIDS

DNC C87-123864

TI Compsn. for controlling scarabid larvae contg. bacterial spores - of milky disease pathogen, free of sporangia and prepd. by in vivo culture.

DC C03 D16

IN ELLIS, B J; METHA, R; OBENCHAIN, F D

PA (REUT-N) REUTER LABS INC

CYC 20
 PI WO 8705928 A 871008 (8741)* EN 40 pp
 RW: AT BE CH DE FR GB IT LU NL SE
 W: AU JP KR
 AU 8772067 A 871020 (8803)
 EP 262195 A 880406 (8814) EN
 R: AT BE CH DE FR GB IT LI LU NL SE
 PT 84552 A 880303 (8814)
 JP 63502961 W 881102 (8850)
 CN 87102246 A 880210 (8913)
 US 4824671 A 890425 (8919) 13 pp
 ES 2004704 A 890201 (8937)
 CA 1283074 C 910416 (9120)
 IL 81857 A 910610 (9130)
 ADT WO 8705928 A WO 87-700574 870312; EP 262195 A EP 87-902272 870312; JP 63502961 W JP 87-502146 870312; US 4824671 A US 86-843163 860324; ES 2004704 A ES 87-816 870324
 PRAI US 86-843163 860324
 REP 4.Jnl.Ref ; US 3503851; US 3790665; US 3950225; US 4626508; US 4661351; 3.Jnl.Ref ; GB 1134678; SSR880928 ; US 3308038; US 3616250
 IC A01N063-00; A61K039-07; C12N001-20; C12N003-00; C12N011-02; C12R003-00
 AB WO 8705928 A UPAB: 930922
 Insecticidal compsn. for controlling Scarabacidae comprises (1) as active ingredient sporangium-free spores of the pathogens which cause milky disease and (2) a carrier or diluent. Also new is in vitro prodn. of milky disease spores (esp. of Bacillus popilliae) comprises growing **vegetative** cells on a liq. medium contg. 0.1-2% soluble starch; 0.1-0.2% **trehalose**; 0.5-1.5% yeast extract; 0.1-0.6% K2HPO4 and 0-0.3% CaCO3, under aerobic conditions at controlled pH. At the end of the **vegetative** phase, 5-250 mg/l of MnSO4 is added as sporulation adjuvant, and inoculation is continued until sporulation occurs.
 USE/ADVANTAGE - The compsn. is used in fields, orchards, pastures, gardens, etc. to control larvae of scarabid beetles. This in vitro method produces large amts. of the spores simply, and provides a high rate (80% or more) of sporulation.
 0/3
 FS CPI
 FA AB
 MC CPI: C04-B02B1; C11-A; C12-N02; D05-H01; D05-H04
 L171 ANSWER 19 OF 21 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD
 AN 87-032901 [05] WPIDS
 DNC C87-013868
 TI Carcinostatic drug compsn. - comprises emulsion of alpha, alpha-**trehalose**-di fatty acid ester, **vegetable** oil, lecithin or surfactant, and water.
 DC A96 B03 B05
 PA (SSSE) SS PHARMACEUTICAL KK
 CYC 1
 PI JP 61289038 A 861219 (8705)* 3 pp
 ADT JP 61289038 A JP 85-129321 850614
 PRAI JP 85-129321 850614
 IC A61K009-10; A61K031-70; C07H013-06
 AB JP61289038 A UPAB: 930922
 A carcinostatic drug with emulsion type, comprising (A) an active amt. of alpha, alpha-**trehalose**-6, 6'-difatty acid ester of formula (I) and an emulsion base material comprising (a) 3-50 wt.% of a **vegetable** oil, (b) 1-50 wt.% of lecithin or a surfactant based on (a), and (c) water. (In (I), R is 1-21C alkyl). The additive amount of

trehalose is 0.1-5 wt.%. (a) is olive oil, sesame oil, soybean oil, camellia oil, rape seed oil, corn oil, peanut oil, cotton seed oil, etc., and sesame oil is preferably used. Lecithin includes soybean lecithin or vitellus lecithin. The surfactant includes polyoxyethylene sorbitan fatty acid ester, hardened castor oil polyoxyethylene derivatives, sorbitan fatty acid ester, etc.. The carcinostatic substance is formed into an injection or a liquid solution through oral route, with dose as being, as **trehalose** difatty acid ester, 0.1-2000mg/kg/day or 0.005-1000 mg/kg/day for non oral route.

USE/ADVANTAGE - Due to the emulsification of **trehalose** with the use of the emulsifier, stability of **trehalose** is improved better.

0/0

FS CPI

FA AB

MC CPI: A12-V01; B04-B01B; B04-B01C1; B04-B03C; B04-C03C; B05-B01P; B07-A02; B12-G07; B12-M03; B12-M09

L171 ANSWER 20 OF 21 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD

AN 81-77750D [42] WPIDS

TI Prepn. of leavened dough mixts. - using mixt. of candida lusitaniae and saccharomyces delbrueckii as leavening yeasts.

DC D16

PA (BEAF) BEATRICE FOODS CO

CYC 2

PI US 4292330 A 810929 (8142)* 4 pp

CA 1146404 A 830517 (8322)

PRAI US 79-58619 790718

IC A21D002-00; A21D008-04

AB US 4292330 A UPAB: 930915

The known prepn. of a leavened dough in which: (a) a dough is formed from a cereal, shortening (I), leavening yeasts (II), and a yeast growth source; and (b) the dough is fermented and leavened is improved by using rapid flavour producing yeasts (III) (mixt. of Candida lusitaniae and Saccharomyces delbrueckii) as (II).

Use of (III) as the leavening yeasts affords higher levels of flavour and aroma in shortened fermentation times, or increased levels of flavour and aroma in normal fermentation times.

Cereal is wheat, oats, rice, barley, corn or rye, etc. (I) is an animal or vegetable oil or fat. Dough may also contain all the conventional ingredients such as salt, malt, milk solids, flavouring agents, etc. Yeast growth source is not sucrose but galactose, **trehalose**, etc. pref. dextrose and amt. used is 0.1-1.5% by wt. of cereal. Wt. ratio (II): baker's yeast if used is 80-20:20-80 pref. 75-50:25-50, esp. 65:35. Amt. of yeast (total) used is 0.1-0.5% by wt. of cereal. Finished dough is baked at 300-500 deg. pref, ca. 400 deg. F.

FS CPI

FA AB

MC CPI: D01-B02

L171 ANSWER 21 OF 21 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD

AN 76-89578X [48] WPIDS

TI Detergent compsn. for foods - contg. a sucrose fatty acid ester, protein and peptide.

DC A97 D25

PA (DAII) DAIICHI KOGYO KK

CYC 1

PI JP 51116806 A 761014 (7648)*

PRAI JP 75-42506 750407

IC C11D001-66; C11D003-37; C11D010-02

AB JP51116806 A UPAB: 930901

Sucrose fatty acid water system liq. detergent compsn. for foods comprises (a) a sucrose fatty acid ester (which consist of (un)satd. fatty acids of 8-20C; the content of monoester is pref. 40-80E%), (b) protein (pref. soluble animal or **vegetable** protein), and (c) peptide (animal or **vegetable** protein hydrolysate of <10,000 mol. wt.) and its salt with sodium, potassium, triethanolamine, etc. as essential components, and further adding a suitable solvent (alcohol such as ethanol, propylene glycol or glycerin or water), a soluble stabiliser (saccharide such as sucrose, glucose, sorbitol, dextrin, raffinose, **trehalose**, etc.) preserving agent, perfume, colouring agent, etc. to it. The washing power and foaming power of sucrose fatty acid ester can be further improved. Also touch and mild feeling to skin can be improved.

FS CPI

FA AB

MC CPI: A03-C01; A12-W09; A12-W12; D11-A03; D11-B07; D11-D01